

Performance Management System

Quarterly Report April 2017







"Our administration is committed to developing innovative solutions that deliver what Marylanders want – an affordable and reliable transportation system. By implementing a comprehensive program of accountability and continual improvements, we will deliver a better transportation system for the citizens of Maryland."

"This is another step our administration is taking to Change Maryland for the Better!"

- Larry Hogan, Governor



The Maryland Department of Transportation and its Transportation Business Units proudly present the official mission statement.



MISSION STATEMENT

"The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life's opportunities." My Fellow Marylanders,

I am proud that the Maryland Department of Transportation Excellerator Performance Management System is in its second year. We have made great strides in developing and implementing performance measures, refining strategies and focusing on delivering results for our customers.

Over the past year, we have created more than 150 individual performance measures that touch every aspect of our business throughout the organization. Whether we are building and maintaining our roads and bridges, running safe and efficient bus and rail systems, operating an international port and airport or improving the vehicle and driver registration process for Marylanders, we stand strong in our commitment and responsibility to deliver the best transportation products and services for our customers.

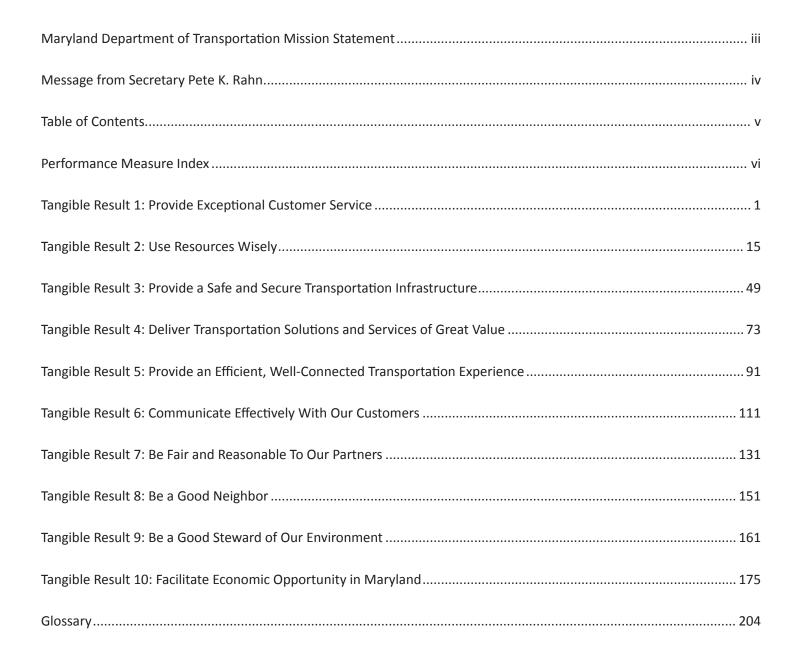


Pete K. Rahn Secretary

Every quarter we review our progress and share our results online for public inspection and within the organization through a live stream of our quarterly review meeting. This allows all 11,000 MDOT employees the opportunity to see the impact of the work they do each day and how they contribute to running a safe and secure transportation system.

Most importantly, we are delivering results. As we respond faster to customer inquiries, become increasingly efficient in using our resources wisely and provide a stronger foundation for economic development for the state, we will continue to deliver exceptional customer service and create more value for those who live and travel throughout Maryland.

I invite you to continue to review our MDOT Excellerator program as we continue down the path of constant progress towards outstanding results.



Tangible Results

Frequency Driver

Tangible Result # 1: Provide Exceptional Customer Service			Leslie Dews, MVA	
1.1	Percent of Overall Customer Satisfaction	Annually (April)	Sean Adgerson, MTA	
1.2	Responsiveness to MDOT Customer Correspondence			
	1.2a - Average Number of Days for Correspondence in the MDOT IQ System	Quarterly	Patrick Corcoran, MAA	
	1.2b - Percent of First Contact Resolution	Quarterly	Rick Powers, MPA	
1.3	Customer Satisfaction with Receiving Goods and Services			
	1.3a - Percent of Abandoned Calls at Call Centers	Quarterly	Darol Smith, MDTA	
	1.3b - Average Call Wait Times at Call Centers	Quarterly	Darol Smith, MDTA	
	1.3c - Level of Satisfaction with Resolving Call Inquiries at Call Centers	Quarterly	Darol Smith, MDTA	
1.4	Customer Satisfaction with Interactions with MDOT Representatives	Annually (April)	Sabrina Bass, TSO	
1.5	Customer Satisfaction with Website Information and Navigation of the MDOT Websites			
	1.5a - Percent of Customer Who Felt MDOT Websites Met Their Needs	Annually (April)	Lindsey Franey, SHA	
	1.5b - Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites	Annually (April)	Lindsey Franey, SHA	
Tangi	ble Result # 2: Use Resources Wisely		Corey Stottlemyer, TSO	
2.1	Percent Capital Dollars Spent as Programmed	Quarterly	Dan Favarulo, TSO	
2.2	Percent of Projects Leveraging Other Funding Sources	Annually (April)	Dan Favarulo, TSO	
2.3	Employee Engagement	Annually (Jan.)	Amber Harvey, MDTA	
2.4	Employee Turnover Rate	Quarterly	Amber Harvey, MDTA	
	Time to Fill Vacancies Quarterly			
2.5	Time to Fill Vacancies	Quarterly	Debbie Hammel, SHA	
	Time to Fill Vacancies Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets	Quarterly Annually (Oct.)	Debbie Hammel, SHA Bill Bertrand, SHA	
2.52.62.7	Percentage of Fixed Asset Units Identified or Accounted for During the			
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets			
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets Managing Capital Assets	Annually (Oct.)	Bill Bertrand, SHA	
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets Managing Capital Assets 2.7a - Number of MDOT Structurally Deficient Bridges 2.7b - Percent of SHA and MDTA Roadway Miles with Acceptable	Annually (Oct.) Annually (Jan.)	Bill Bertrand, SHA Tony Moore, MPA	
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets Managing Capital Assets 2.7a - Number of MDOT Structurally Deficient Bridges 2.7b - Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides	Annually (Oct.) Annually (Jan.) Annually (April)	Bill Bertrand, SHA Tony Moore, MPA Nicole Katsikides, SHA	
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets Managing Capital Assets 2.7a - Number of MDOT Structurally Deficient Bridges 2.7b - Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides 2.7c - Rating of Rail in "Good" Condition 2.7d - Percent of Channel Segments with U.S. Army Corps of Engineers	Annually (Oct.) Annually (Jan.) Annually (April) Annually (April)	Bill Bertrand, SHA Tony Moore, MPA Nicole Katsikides, SHA Tony Moore, MPA	
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2.10	Relationship Between Procurement Competition and Cost	Quarterly	Laura Getty, MTA
2.11	Number of Internal Audit Findings and Number of Repeat Internal Annual Audit Findings		Patrick Bradley, MAA
2.12	Number of Legislative Repeat Audit Findings	Annually (Jan.)	Patrick Bradley, MAA
2.13	Response to Fraud Hotline Complaints, including Resposne Time and Effective Resolution Quarterly		Steve Watson, TSO
2.14	Managing Real Property Assets - UNDER DEVELOPMENT	Annually	David Maier, TSO
Tangib	le Result # 3: Provide a Safe and Secure Transportation Infrastructure		Sarah Clifford, MDTA
3.1	Number of Crimes Against Persons and Property Committed at MDOT Facilities	Quarterly	Bud Frank, TSO
3.2	Number of Traffic-Related Fatalities on All Roads	Quarterly	Thomas Gianni, MVA
3.3	Maryland Traffic-Related Fatality Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.4	Number of Traffic-Related Serious Injuries on All Roads	Quarterly	Thomas Gianni, MVA
3.5	Maryland Traffic-Related Serious Injury Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.6	Maryland Seat Belt Usage Rate Annually (J		Gina Watson, MPA
3.7	Disabled Motorist Assisted by MDOT	Quarterly	Cedric Ward, SHA
3.8	Number of Employee Injuries Reported (First Report of Injury)	Quarterly	Cedric Johnson, MAA
3.9	Number of Employee Lost Work Days Due to Injuries	Quarterly	Cedric Johnson, MAA
3.10	Number of Customer Incidents on MDOT Facilities	Quarterly	Phil Thomas, MTA
3.11	Number of Employees Trained Under National Incident Management System (NIMS) - UNDER DEVELOPMENT	Annually (Oct.)	Bud Frank, TSO
Tangib	gible Result # 4: Deliver Transportation Solutions and Services of Great Value		Jason Ridgway, SHA
4.1	Percent of Estimated Project Budget as Compared to Final Project Award	Annually (Oct.)	Terri Lins, MVA
4.2	Percent of Change for Finalized Contracts	Annually (Oct.)	Brian Miller, MPA
4.3	On Time Services and Solutions – Percent of Projects Completed by Original Contract Date	Annually (Oct.)	Bill Appold, TSO
4.4	Average Cost of Common Solutions and Services		
	4.4a - Minor Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4b - Major Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4c - Interstate Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4d - Average Bridge Replacement Cost	Annually (July)	Jim Harkness, MDTA
	4.4e - Average Bridge Redecking Cost	Annually (July)	Jim Harkness, MDTA
	4.4f - Operating Cost Per Passenger Trip	Annually (Jan.)	Pat Keller, MTA
	4.4g - Operating Cost Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA

	4.4h - Passenger Trip Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA			
	4.4i - Farebox Recovery Ratio	Annually (Jan.)	Wayne Schuster, MAA			
	4.4j - Cost Per Transaction (MVA)	Annually (Jan.)	Wayne Schuster, MAA			
Tangi	ble Result # 5: Provide An Efficient, Well Connected Transportation Expe	rience	Phil Sullivan, MTA			
5.1	Reliability of the Transportation Experience					
	5.1a - Percentage of Tolls Collected via Cash	Quarterly	Scott Jacobs, MDTA			
	5.1b - Average Annual Truck Turn Time Per Container Transaction	Annually (Jan.)	Dave Thomas, MPA			
	5.1c - Average Wait Time MVA	Quarterly	Dave Thomas, MPA			
	5.1d - On Time Performance MTA & MAA	Quarterly	Robert Pond, MTA			
	5.1e - Planning Time Index for Highway Travel	Annually (April)	Roxane Mukai, MDTA			
5.2	Restoring Transportation Services					
	5.2a - Restoring Transportation Services - Average Time to Restore Normal Operations After Disruptions	Annually (April)	Glenn McLaughlin, SHA			
	5.2b - Restoring Transportation Services - Average Time to Restore Normal Operations After a Weather Event	Annually (April)	Glenn McLaughlin, SHA			
5.3	Percent of Transportation Services and Products Provided Through Alternate Service Delivery Methods	Semi-Annually (April & Oct.)	Negash Assefa, MVA			
5.4	Functionality of Real-Time Information Systems (RTIS)					
	5.4a - Percent of Functional Real-Time Information Systems Provided	Quarterly	Ralign Wells, MAA			
	5.4b - Customer Satisfaction with the Accuracy of Real-Time Information Systems Provided	Annually (July)	Ralign Wells, MAA			
Tangi	ble Result # 6: Communicate Effectively With Our Customers		Diane Langhorne, TSO			
6.1	Communicate Effectively Utilizing Social Media					
	6.1a - Social Reach	Quarterly	Katie Bennett, MDTA			
	6.1b - Social Engagement	Quarterly	Richard Scher, MPA			
6.2	Satisfaction with Communication at Public Meetings	Quarterly	Sharon Rutzebeck, MVA			
6.3	Communicate Effectively through News Releases					
	6.3a - Number of News Stories Generated from Major Releases	Quarterly	Jonathan Dean, MAA			
	6.3b - Earned Media Value of Print and Broadcast Coverage Generated by News Releases					
	6.3c - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA			
6.4	Communicate Effectively to Customers with English Language Barriers at Public Meetings	Quarterly	Lisa Dickerson, TSO			

Tangil	ole Result # 7: Be Fair and Reasonable To Our Partners	Wanda Dade, SHA			
7.1	Percentage of Minority Business Enterprise (MBE) Participation Achieved by each Transportation Business Unit	Quarterly	Angela Martin, MAA		
7.2	Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor	Angela Martin, MAA			
7.3	Percent of Payments Awarded to Small Business Reserve (SBR) Contracts	Quarterly	Wonza Spann-Nicholas, MPA		
7.4	Percent of Veteran Owned Small Business Enterprise (VSBE) Participation	Annually (Jan.)	Natalie Grasso, MVA		
7.5	Level of Satisfaction of Our Business Partners	Quarterly	Luther Dolcar, MDTA		
7.6	Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements	Quarterly	David Lynch, MTA		
7.7	Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals	Quarterly	Mike Zimmerman, TSO		
7.8	Economic Impact of Supplier Diversity Program - UNDER DEVELOPMENT	Annually (Oct.)	Tracie Watkins-Rhodes, TSO		
Tangi	ole Result # 8: Be a Good Neighbor		Simon Taylor, MAA		
8.1	Percent of MDOT Facilities that Meet or Exceed our Neighbor's Expectations	Anthony Crawford, SHA Tim Cooke, MDTA			
8.2	Level of Satisfaction with Educational/Civic Outreach Efforts with our Neighbors				
	8.2a - Number of Educational/Civic Outreach Efforts with our Neighbors	Quarterly	rly Michael Phennicie, MAA		
	8.2b - Satisfaction with the Educational/Civic Outreach Efforts	Annually (April)	Jill Lemke, MPA		
8.3	Percent of MDOT Facilities that are ADA Compliant Annually (Apr		Jim Hoover, MTA Terri Whitehead, MVA		
8.4	Property Damage Claims - UNDER DEVELOPMENT				
	8.4a Number of Property Damange Claims Filed by TBU - UNDER DEVELOPMENT	Quarterly	Tim Cooke, MDTA		
	8.4b Percent of Customers Satsified with How Their Property Claim Was Handled - UNDER DEVELOPMENT	Quarterly	Tim Cooke, MDTA		
8.5	Number of Traffic Violations While Driving a State Vehicle by TBU - Quarterly UNDER DEVELOPMENT Quarterly		Dave Seman, TSO		
Tangil	ole Result # 9: Be a Good Steward of Our Environment	Dorothy Morrison, TSO			
9.1	Water Quality Treatment to Protect and Restore the Chesapeake Bay	Annually (Oct.)	Sonal Ram, SHA		
9.2	Fuel Efficiency				
	9.2a - Miles Per Gallon (PM Retained)	Annually (April)	Paul Truntich, MDTA		
	9.2b - Total Gallons Consumed	Annually (Oct.)	Paul Truntich, MDTA		
9.3	Percent of Maryland Recycling Act Materials Recycled	Annually (April)	Hargurpreet Singh, MVA		

9.4	Recycled/Reused Materials from Maintenance Activities and Construction/Demolition Projects Annually (April)		Barbara McMahon, MPA
9.5	Compliance with Environmental Requirements	Annually (Oct.)	Robin Bowie, MAA
9.6	Energy Consumption	Laura Rogers, TSO	
Tangib	le Result # 10: Facilitate Economic Opportunity in Maryland		Jim Dwyer, MPA
10.1	Economic Return from Transportation Investment	Annually (Jan.)	John Thomas, SHA
10.2	National Ranking of Maryland's Transportation Infrastructure	Annually (Oct.)	John Thomas, SHA
10.3	Freight Mobility		
	10.3a - Freight Analysis Framework (FAF) Tonnage and Value of Freight	Annually (April)	Juan Torrico, MTA
	10.3b - Port of Baltimore Total International Cargo Tonnage Port-Wide, Market Share and Rankings	Quarterly	Juan Torrico, MTA
	10.3c - MPA Total General Cargo Tonnage including Containers, Autos, RoRos and Imported Forest Product	Quarterly	Juan Torrico, MTA
10.4	Number and Percentage of Bridges on the State System that are Weight-Posted Annually (July		Rafael Espinoza, MDTA
10.5	Change in Market Access due to Improvements in the Transportation Network Annually (Oct.)		Corey Stottlemyer, TSO
10.6	Change in Productivity due to Improvements in the Transportation Network Annually (Oct.)		Corey Stottlemyer, TSO
10.7	Total User Cost Savings for the Traveling Public Due to Congestion Management Annually (Jan.)		John Thomas, SHA
10.8	Percent of Vehicles Miles Traveled (VMT) in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours	Annually (Jan.)	John Thomas, SHA
10.9	Market Share		
	10.9a – Percent of Nonstop Markets Served Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
	10.9b - Martin State Airport's Regional Market Share	Quarterly	Jack Cahalan, MAA
	10.9c - Number of Passengers and Departing Flights Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
10.10	Percent of Roadway Access Permits Issued within 21 Days or Less	Annually (Jan.)	Glen Carter, TSO

Provide Exceptional Customer Service

TANGIBLE RESULT #1

Provide Exceptional Customer Service



Every MDOT employee is responsible for delivering exceptional customer service by providing customers with respectful, timely and knowledgeable responses to all inquiries and interactions.

RESULT DRIVER:

Leslie Dews Motor Vehicle Administration (MVA)

TANGIBLE RESULT DRIVER:

Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Sean Adgerson Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track MDOT's progress towards its mission of providing exceptional customer service.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data is collected through a standardized survey of randomly selected Marylanders.

NATIONAL BENCHMARK:

American Customer Service Index.

PERFORMANCE MEASURE 1.1

Percent of Overall Customer Satisfaction

Marylanders expect MDOT to deliver exceptional services and products. Measuring the percent of overall customer satisfaction is the best way to determine how the Department is doing in the delivery of exceptional customer service. It also identifies areas of strength and areas of opportunities or weaknesses to address.

For calendar year 2016, MDOT's overall customer satisfaction rating was 76% based on the survey conducted by MDOT, which is down 3.4 points from 2015. Compared to the American Customer Satisfaction Index (ACSI), the results are 11.5 points below the highest ranked companies of Chickfil-a and Lincoln.

MDOT has been working with the University of Baltimore to develop a standardized annual survey of Marylanders that will be used as the sole record for determining overall customer satisfaction rating. This survey will also provide information on the friendliness and professionalism of employees, the accuracy and thoroughness of the work, the upkeep of facilities, and the timeliness of the services provided.

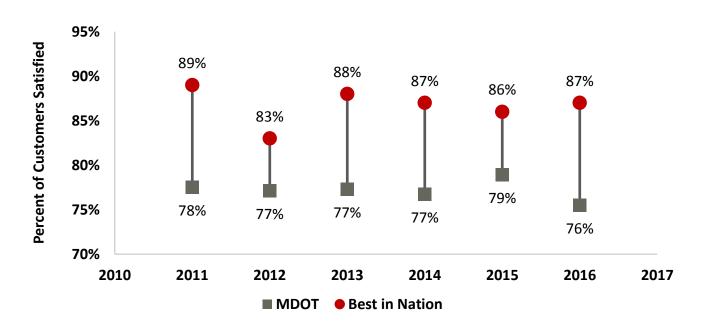
In addition to the standardization of the survey results, the business units have been actively implementing programs and service enhancements that have a direct influence on the quality of the services and products offered. Some of those changes include:

- Mandatory customer service training for all employees at TBUs and the development of customer service plans, aligned with the Governor's statewide customer service initiatives.
- Implementation of several different customer enhancements including kiosks, handheld electronic devices, new systems, and facilities improvements to increase efficiency and convenience for customers to conduct transactions with MDOT.



Percent of Overall Customer Satisfaction

Chart 1.1.1: Percent of Overal MDOT Customer Satisfaction vs. Best in Nation 2011-2016



TANGIBLE RESULT DRIVER:

Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Patrick Corcoran
Maryland Aviation Administration
(MAA)

PURPOSE OF MEASURE:

To track responsiveness to customer inquiries.

FREQUENCY:

Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY: MDOT IQ system.

NATIONAL BENCHMARK:

10 days (MDOT established benchmark).

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Timely response to customer correspondence communicates the importance MDOT places on addressing their needs and demonstrates the organization's commitment to exceptional customer service. In addition, inquiries, service requests, ideas and concerns conveyed in customer correspondence often identify opportunities to improve the overall customer experience and satisfaction with MDOT.

As shown in Chart 1.2A.1, for the period of October 1-December 31, 2016, the average number of days for MDOT response to customer correspondence assigned by the Governor's Office was 28 days. This represents a significant improvement over the first quarter of 2016 when the average number of days for response was 120 days. Each TBU has shown significant improvement from the first quarter to fourth quarter of 2016 as illustrated in Chart 1.2A.2.

MDOT has made significant improvement in responsiveness to customer correspondence. Improvements have been achieved through establishing clear guidelines and processes for correspondence management standard across TBUs and providing training and technical assistance to correspondence managers and other accountable staff. In addition, a working team has been established to review internal processes at TBUs for managing all customer contact, identify efficiencies and best practices and define uniform standards for all mediums of customer contact (letters, email, phone, etc.) regardless of origin.

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Chart 1.2A.1: MDOT-Wide Average Number of Days to Respond to Correspondence in MDOT IQ System 2016

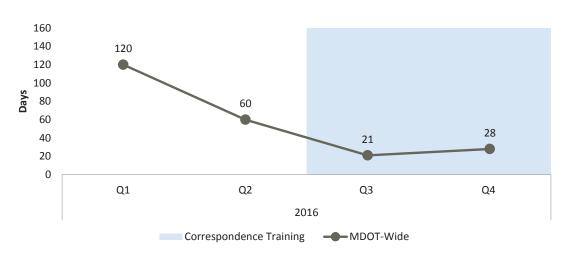
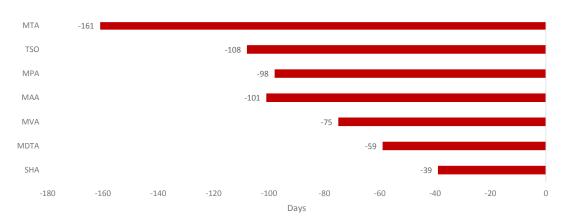


Chart 1.2A.2: Change in Average Days for Correspondence in MDOT IQ System Q1 2016 vs. Q4 2016 by TBU



TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Richard Powers

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To track the rate of first contact resolution to MDOT customer correspondence and ensure responsiveness to customer needs.

FREQUENCY:

Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY:

Database Metrics Provided by TBUs.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 1.2B

Responsiveness to MDOT Customer Correspondence: Percent of First Contact Resolution

Improving MDOT's ability to address customer requests, issues and concerns in one interaction ensures fast and accurate service to customers and improves their overall perception of the effectiveness of the organization and satisfaction with goods and services received. Performance in first contact resolution also identifies the level of efficiency in operations and opportunities for improvement.

For the period October 1-December 31, 2016, MVA and MTA submitted data regarding first contact resolution for customer correspondence received. Chart 1.2B.1 shows MVA achieved 100% first contact resolution, maintaining a positive trend. Likewise, Chart 1.2B.2 shows that MTA realized 93% first contact resolution compared to 78% in Q3 of 2015.

MDOT continues to work on the development of a comprehensive approach for managing customer contact across TBUs. As reported previously, a review of existing systems and processes for customer contact management is underway. Ultimately, the solution will ensure that the organization provides exceptional service to customers in a manner that is responsive, timely, consistent and reflective of the varying means of customer engagement.

Chart 1.2B.1: MVA Percent of First Contact Resolution Q4 2015 vs Q4 2016

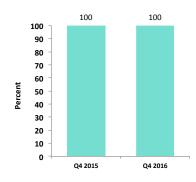
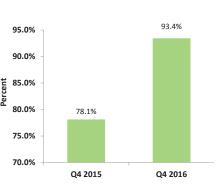


Chart 1.2B.2: MTA 1st Contact Resolution within 1 day Q4 2015 vs Q4 2016



Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To identify the percentage of customers not connecting or speaking with call centers which results in not receiving goods or services from MDOT.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

Database metrics provided by TBUs. Calculated formula abandoned calls divided by total inbound calls – in percent.

NATIONAL BENCHMARK:

Eight percent average sampled industry leader (no national industry standard available).

PERFORMANCE MEASURE 1.3A

Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers

Reducing the rate of abandoned calls to MDOT call centers will ensure that more customers reach MDOT to address their needs. The longer the time customers must wait before being connected to a call center agent, the higher the abandon rate. The inability of customers to connect with MDOT representatives negatively impacts their level of satisfaction with the goods and services received from the organization.

As shown in Chart 1.3.A.1, the abandonment rate for the period October 1-December 31, 2016 was 9%. For CY 2016, the average abandonment rate was 12%, which remains higher than the benchmark of 8%. MDOT continues to improve performance in this area with Q4 CY2016 average abandonment rate of 8%, compared to 10% in Q4 of CY2015 and CY2014.

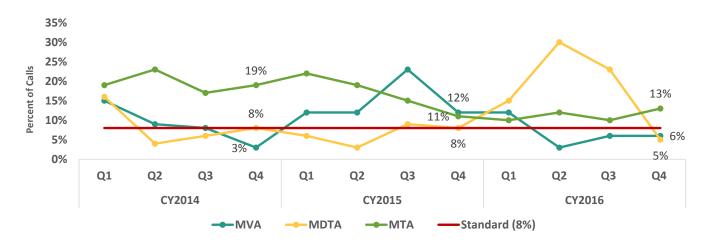
Targeted process improvements and other changes are influencing the positive results at individual TBU call center operations. Changes undertaken to enhance the performance of MDOT call center operations include:

- Conducting biweekly meetings with call center representatives across MDOT TBUs to share operational and customer service best practices and call center needs
- Augmenting staffing resources to address customer demand
- Implementing call triage process to reduce call wait times
- Revamping Interactive Voice Response (IVR) so that customers can reach agents or conduct phone transactions more rapidly
- Expanding hours

PERFORMANCE MEASURE 1.3A

Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers

Chart 1.3A.1: Percent of Abandoned Calls at Call Centers 2014-2016



Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To collect and evaluate the time it takes the average customer to wait before speaking with the call center.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Database metrics provided by TBUs. Average amount of time caller waits.

NATIONAL BENCHMARK:

60 seconds average sampled industry leaders (no national industry standards available).

PERFORMANCE MEASURE 1.3B

Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers

Providing consistent and responsive service is a top priority for the organization. Reducing the time it takes for customers to reach MDOT call center representatives ensures customer needs are addressed more rapidly and increases their satisfaction with the support and overall customer service provided by MDOT. This measurement can also identify opportunities (additional training, changes in technology, etc.) for managers to improve operational efficiency and performance.

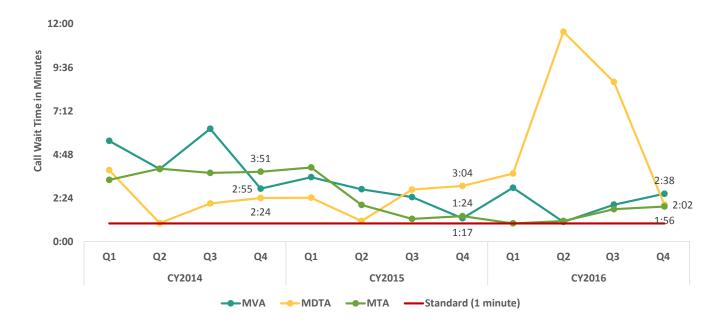
For the period October 1-December 31 2016, Chart 1.3B.1 shows that the average call wait time was 2:12, compared to 4:12 in the previous quarter. The overall CY 2016 call wait time was 3:23, significantly higher than the benchmark of 60 seconds. MDOT call centers continues to make improvements.

As previously mentioned, targeted process improvements such as collaboration across TBU call centers, staff augmentation, adoption of best practices and other operational and technology changes are influencing the positive direction for MDOT call center operations.

PERFORMANCE MEASURE 1.3B

Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers

Chart 1.3B.1: Call Wait Times at Call Centers 2014-2016



Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To assess customer satisfaction with call centers resolving call inquiries.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Phone survey of call center customers.

NATIONAL BENCHMARK:

82 percent average sampled industry leaders (no national industry standard available).

PERFORMANCE MEASURE 1.3C

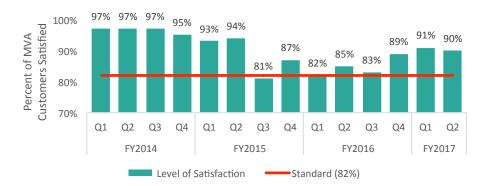
Customer Satisfaction with Receiving Goods and Services: Level of Satisfaction with Resolving Call Inquiries at Call Centers

The level of satisfaction with resolving call inquiries is an indicator of whether MDOT is meeting customers' expectations. MVA is currently the only call center that has a data collection mechanism in place for this performance measure.

As shown in Chart 1.3C.1 for the period October 1 – December 31, 2016, MVA achieved 90% average level of satisfaction with resolving call inquiries which is more than the benchmark of 82%. The combined performance for FY 2017 Q1 and Q2 is 90%. This data continues to illustrate a trend back to prior TBU achievement levels that are better than the benchmark in place today.

A focus on process improvement and other changes are influencing the positive results at MDOT call centers. MDOT continues to work on a mechanism to capture customer satisfaction for all TBU call centers. Changes to the MVA call center to enhance customer service and performance include consolidating call center operations, expanding hours and implementing a call triage process to reduce call wait times.

Chart 1.3C.1: Level of Satisfaction with Resolving MVA Call Inquiries FY2014-FY2017



TANGIBLE RESULT DRIVER:

Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Sabrina Bass

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To better determine how satisfied MDOT customers are when interacting with MDOT representatives.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data is collected through a survey design utilizing an on-site, in-person intercept method, complemented by online surveys.

NATIONAL BENCHMARK:

Highest American Customer Satisfaction Index (ACSI) rate -87 percent.

PERFORMANCE MEASURE 1.4

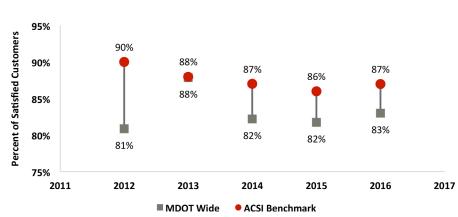
Customer Satisfaction with Interactions with **MDOT** Representatives

Ensuring that every customer contacting MDOT has access to knowledgeable, professional and courteous MDOT representatives improves overall customer experience and builds trust in the organization and its products and services.

For calendar year 2016. MVA and SHA submitted data on overall satisfaction with interactions with MDOT representatives derived from front-line surveys. Chart 1.4.1 shows that 83% of customers agreed that MDOT representatives were professional and respectful during their interactions compared to the ACSI benchmark of 87%.

MDOT continues to implement strategies to improve customer service. Each TBU has a customer service plan that includes mandatory customer service training for all employees, which aligns with the Governor's statewide customer service initiative. Additionally, a measurement of customer satisfaction with MDOT representatives is incorporated in the standardized annual survey MDOT is developing and will allow for the capture of data for this measure across all TBUs. The results will be used to enhance training and improve customer service provided by MDOT representatives.

Chart 1.4.1: Customer Satisfaction with Interaction with **MDOT Representatives 2012-2016**



Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Lindsey Franey

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY: On-line Survey.

NATIONAL BENCHMARK:

ACSI e business report average of highest annual scores for social media, portal/ search engine and news/opinion websites.

PERFORMANCE MEASURE 1.5A

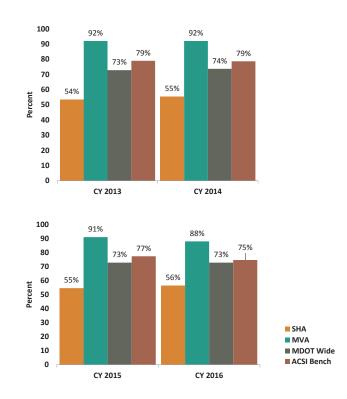
Percent of Customers Who Felt MDOT Websites Met Their Needs

Customers expect 21st century interactions with MDOT. Improving the quality of MDOT websites ensures customers have access to information, request services and process transactions at their convenience. This further enhances the level of customer service provided by the agency.

For 2016. Chart 1.5A.1 shows that 56.5 % of SHA customers found SHA's website to be helpful while 88% of eMVA customers would recommend MVA's website. The ACSI benchmark for 2016 was 74.67% favorability.

To ensure continuous improvement with customer satisfaction with MDOT websites, an online survey, which better mirrors the ACSI benchmarks, has been developed and is now live on all TBU homepages. Information dervied from the surveys will allow the identification of opportunities for improvement for all MDOT websites to better meet the needs of customers.

Chart 1.5A.1: Percent of Customers Who Felt **MDOT Websites Met Their Needs 2013-2016**



TANGIBLE RESULT DRIVER:

Leslie Dews Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Lindsey Francy

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY: On-line Survey

NATIONAL BENCHMARK:

ACSI e business report average of highest annual scores for social media, portal/search engine and news/opinion websites with specifics on ease of use, ease of navigation and site performance.

PERFORMANCE MEASURE 1.5B

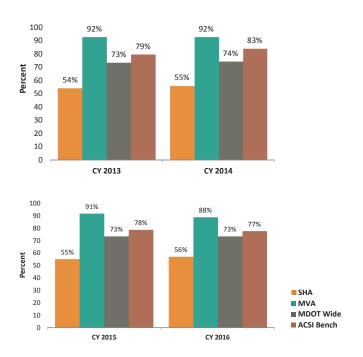
Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites

MDOT's considerable online presence enables customers to report and obtain information on goods and services as well as process transactions. The quality of MDOT's websites is a key component in providing exceptional customer service. To improve customer satisfaction, websites must be structured, and information presented, in a way to ensure the ease of navigation for customers to find what they want quickly.

Existing survey results for 2016 indicated that 56.5% of SHA customers found SHA's website to be helpful while 88% of eMVA customers would recommend MVA's website. The ACSI benchmark for 2016 was 77% favorability.

In 2016 not all TBUs were capturing data to determine if customers felt that their attempts to find desired information on MDOT websites was effortless. All TBUs now have links to take a survey that better tracks the ACSI benchmarks. All TBUs went live in mid-February 2017. Data derived from the surveys will be used to identify improvements in MDOT websites to enhance ability of customers to find information on the website.

Chart 1.5B.1: Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites 2013-2016



TANGIBLE RESULT #2

Use Resources Wisely



MDOT receives resources from our customers and they expect products and services in return. To better serve our customers, MDOT must maximize the value of every dollar we spend.

RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Dan Favarulo The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track the efficiency of capital spending.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Track capital project spending versus the Consolidated **Transportation Plan** appropriated funds.

NATIONAL BENCHMARK:

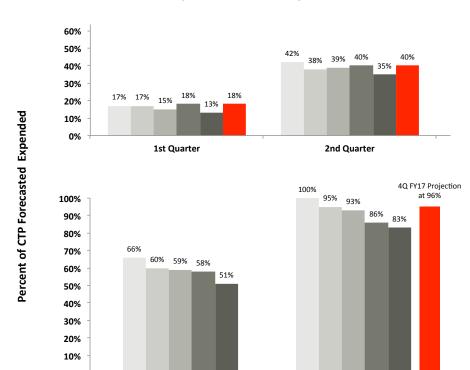
PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed

The purpose of this measure is to show MDOT's customers that each TBU is spending its forecasted capital dollars on a quarterly basis with the goal of efficiently meeting its allocation by the end of the fiscal year. Dollars spent divided by dollars appropriated will be compared to the same time period from previous fiscal years.

As of the 2017 2nd quarter, MDOT's capital program spending rate was at 40 percent of Consolidated Transportation Program forecasted funds expended, which is 1 percent higher than the historical average of 39 percent expended at this time of year. MDOT's latest capital forecast is predicting a 96 percent expenditure rate in FY 2017.

Chart 2.1.1: 6 Year Expenditure Rate Analysis (Federal & State)



■ FY 2012 ■ FY 2013 ■ FY 2014 ■ FY 2015 ■ FY 2016 ■ FY 2017

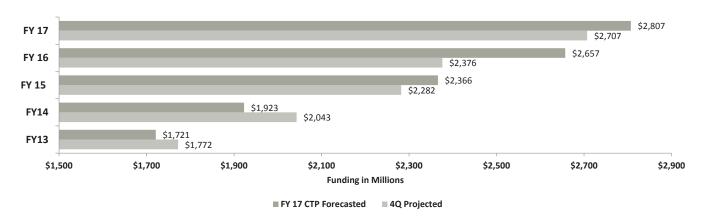
4th Quarter

3rd Quarter

Percent Capital Dollars Spent as Programmed

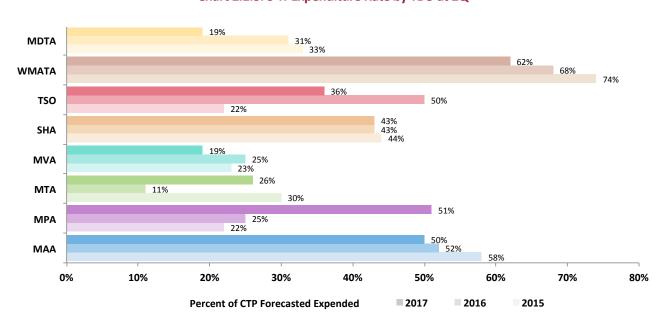
MDOT is currently projected to expend \$100 million less than the \$2.8 billion originally forecasted in the Final FY16-21 CTP for FY 2017. This decrease is a result of funding deferrals due to reductions in revenue forecasts as well as some major project cash flow adjustments.

Chart 2.1.2: FY17 CTP Forecasted vs 4Q Projected Amounts



Below is a breakdown by each TBU of where they are now compared to the historic percent expended at the 2nd Quarter Mark.

Chart 2.1.3: 3 Yr Expenditure Rate by TBU at 2Q

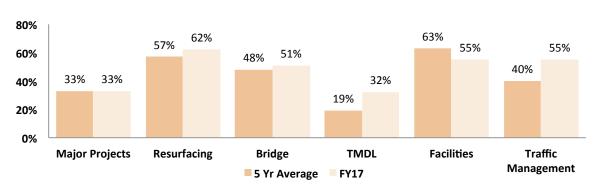


PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed

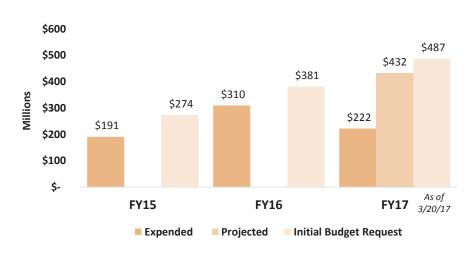
SHA is a major contributing factor to the overall MDOT expenditure rate due to the size and scope of its program. As a result, keeping a pulse on expenditure rates by the different SHA Fund Programs will proactively monitor for any early warnings. Currently all large programs are meeting or exceeding their expenditure rates for this time of year. Due to the mild winter, expenditure rates are expected to continue to exceed historical averages.

Chart 2.1.4: SHA - 2Q Mark Expenditure Rates By Program



SHA's major project is currently trending at the average for the 2nd Quarter. The latest forecasted amount for major projects is \$50 million lowered than originally forecasted in the FY16-21 CTP due to several large project schedule changes and revised estimates. Review of spending peformance has indicated that construction algorithm forecasts are accurate but due to several large project changes and uncertain utility expense forecasts, projections have been off over the last few years.

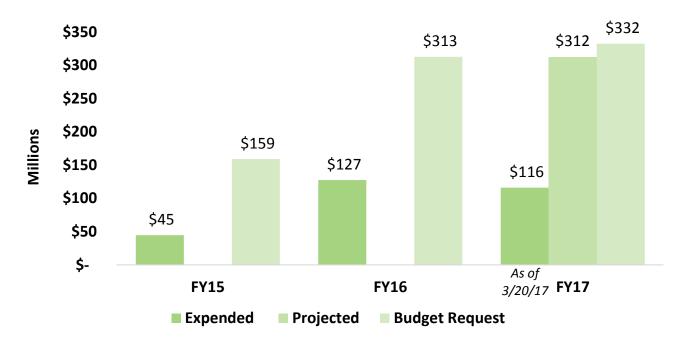
Chart 2.1.5: SHA Major Projects - Budgeted vs. Expended (Federal & State) FY2015-FY2017



Percent Capital Dollars Spent as Programmed

MTA's Purple Line project is roughly 15 percent of the total MDOT program and greatly affects MDOT's overall expenditure rate. Monitoring this project will provide early warnings of hitting budget projections. This project has historically missed funding targets. The Purple Line has currently spent 35 percent of the FY16-21 CTP forecasted amount in FY 2017 and has already expended almost as much as was expended in FY16. Spending peformance looks like it is trending up but current litigation will impact the remaining year spending performance.

Chart 2.1.6: Purple Line Budgeted vs. Expended (Federal & State) FY2015-FY2017



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Dan Favarulo The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To measure the amount of other sources of dollars utilized to fund capital projects as an indicator of MDOT's efforts to leverage its finite resources.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

This measure will track county/ local contributions, private contributions, and federal discretionary funding received each year towards projects.

NATIONAL BENCHMARK:

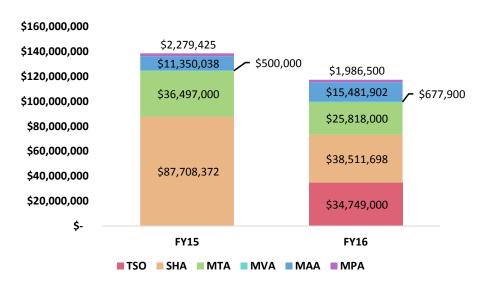
PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other **Funding Sources**

The purpose of this measure is to track and highlight incidences to leverage Transportation Trust Fund (TTF) dollars with local and private dollars to better understand how MDOT is using its finite financial resources.

MDOT leveraged \$117 million in other funding in FY 16. This represents roughly 5 percent of the total FY17 capital program expended. Most of this funding was leveraged by SHA through private contributions, MTA through Purple Line enabling projects, as well as TSO through the award of discretionary funding for the Maglev project.

Chart 2.2.1: Other Funding Leveraged by TBU FY2015-FY2016



Percent of Projects Leveraging Other Funding Sources

Of the \$117 million in other funding leveraged in FY16, \$51 million was received from successfully competing for discretionary federal funding. Another \$34 million was leveraged from private contributions towards roadway improvements on SHA right-of-way. This is down from \$74 million in FY15. In addition, there was another \$32 million in local/county contributions in the form of funding or enabling projects.

Chart 2.2.2: Amount of Other Funding Leveraged By Source FY2015-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Amber Harvey Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To track the commitment of employees in furthering MDOT's reputation, mission and interests by identifying key motivators and obstacles in the workplace.

FREQUENCY:

Annually

DATA COLLECTION METHODOLOGY:

Develop and implement one MDOT employee engagement survey administered to all employees. Online and hard copies will be made available. Cloud-based and mobile platforms are a consideration.

NATIONAL BENCHMARK:

- *GALLUP 2015 national engagement percentages:
- 32 percent engaged employees
- 50.8 percent not engaged
- 17.2 percent actively disengaged

PERFORMANCE MEASURE 2.3 **Employee Engagement**

Engagement accounts for the emotional commitment an employee has for MDOT and the amount of discretionary effort the employee expends on behalf of MDOT. Engaged employees go beyond what they "have to do" to what they "want to do" for MDOT and its customers.

MDOT embarked on its first ever department-wide Employee Feedback Survey that will:

- Eliminate redundant efforts and minimize expense by combining talent and resources;
- Ensure a systematic and consistent approach to employee engagement across all MDOT business units:
- Accurately gauge the workforce climate to develop and prioritize new business strategies and;
- Be a feasible, flexible and sustainable resource for future use.

MDOT partnered with Towson University's Regional Economic Studies Institute (RESI) to develop and administer the feedback survey across all TBUs and the more than 10,000 workforce. The survey was open January 10, 2017 – February 7, 2017 with online and paper options available. As shown in Table 2.3.1, nearly 4,500 employees participated in "Shaping the Future of MDOT, Together" for a 44.5% total response rate. MDOT is greatly encouraged by the participation and collaboration in this initiative. Table 2.3.2 gives an overview of the response rates from similar surveys administered by other state governments.

RESI is currently completing its analysis with a final report due in May.

PERFORMANCE MEASURE 2.3 **Employee Engagement**

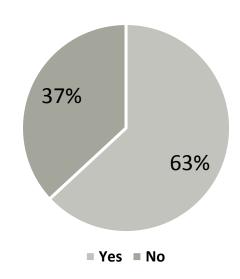
Table 2.3.1: 2016 MDOT Employee Feedback Survey Response Rates

TBU	Number of Survey Responses	Number of Employees	Response Rate
MAA	248	471	52.7%
MPA	136	192	70.8%
MTA	803	3,202	25.1%
MVA	690	1,628	42.4%
SHA	1,382	2,701	51.2%
MDTA	659	1,561	42.2%
TSO	172	286	60.1%
No TBU Selected	374	N/A	N/A
TOTAL	4,464	10,041	44.5%

Table 2.3.2: Survey Response Rates for Other Government Systems

Entity	Year	Completed Surveys	Response Rate
California	2015	2,604	52%
Illinois	2015	19,380	39.9%
Illinois Department of Transportation	2015	-	33.9%
Michigan	2015	31,833	71%
Michigan Department of Transportation	2015	2,046	75%
Vermont	2016	4,506	55.7%
Vermont Department of Transportation	2016	524	50.6%
Washington	2015	42,669	72%
Washington Department of Transportation	2015	3,360	49%
Federal	2016	407,789	45.8%
Federal Department of Transportation	2016	14,871	49.8%

Chart 2.3.1: Would you consider MDOT to have a positive workplace environment?



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Amber Harvey Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To identify the percentage of employees who leave MDOT and analyze trends in voluntary and involuntary separations.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Quarterly reports of employee separations are provided by TSO HRIS Unit. These reports show the number of separations during a given period of time for each TBU broken down by all available separation codes (i.e. reasons).

NATIONAL BENCHMARK:

U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. State and Local Governments

PERFORMANCE MEASURE 2.4 **Employee Turnover Rate**

Annual employee turnover rate is the ratio of total separations, both voluntary and involuntary, compared to the average number of employees during the given timeframe, expressed as a percentage. The Human Resource Information System (HRIS) Unit in the Human Resources Division of the TSO provided the total number of employees and total number of separations for each TBU on a quarterly basis. The national benchmark was determined by utilizing the U.S. Bureau of Labor Statistics Job Opening and Labor Turnover Survey (JOLTS) data for U.S. state and local governments (excluding education, seasonally adjusted) total employee separations.

Chart 2.4.1 compares the turnover rate of each TBU for the 2nd quarter (Q2) of FY 2016 and 2017. Chart 2.4.2 compares the MDOT total turnover rate to the national average for state and local governments. MDOT remains consistently below the national average, which reflects a positive trend for MDOT.

Employee Turnover Rate

Chart 2.4.1: TBU Employee Turnover Rate Seasonal Comparison of 2nd Quarter 2016 vs. 2017

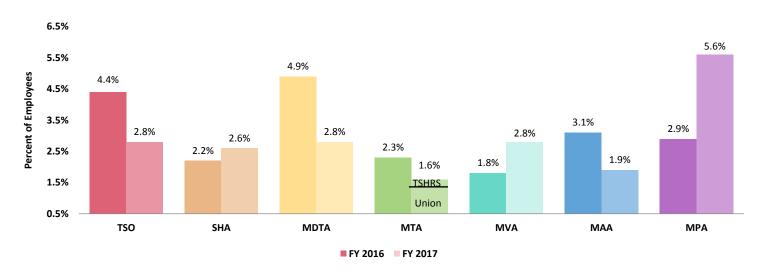
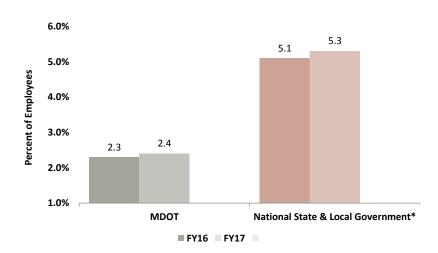


Chart 2.4.2: Employee Turnover Rate Seasonal Comparison of 2nd Quarter 2016 vs. 2017



PERFORMANCE MEASURE 2.4

Employee Turnover Rated

One notable element that continues to be important in analyzing MDOT turnover is the employee separations that occur within one year from the date of hire. The following chart illustrates the number of newly hired employees that have separated from MDOT in comparison to all other separations occurring in Q2 of FY 2017. This data reflects that approximately 16% percent of all employee separations during this timeframe occurred within the first year of hire. This is a 3% decrease from Q1 of FY 2017 which reflects a positive trend for MDOT.

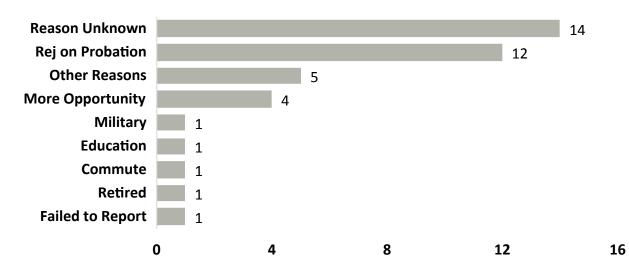
Chart 2.4.3: FY2017 Q2 Employee Separations



PERFORMANCE MEASURE 2.4 **Employee Turnover Rate**

Several action strategies are underway to address employee turnover concerns. In October 2016, MDOT and MTA successfully identified and resolved a payroll system coding limitation that now allows the appropriate reason for separation to be tracked for all MTA employees, including TSHRS and union employees. Properly identifying the reason these employees choose to leave MDOT is a crucial factor in developing successful business practices to retain a healthy workforce and lower turnover costs. In addition, MDOT and TSO collected exit interview procedures and materials from all TBUs and a review of these materials is underway to determine best practices and areas for improvement. MDOT and TSO are also leading the effort to develop a MDOT employee separation policy to document and standardize necessary procedures.

Chart 2.4.4: FY2017 Q2 Separations Within 1 Year of Hire



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Ofice (TSO)

PERFORMANCE MEASURE DRIVER:

Deborah Hammel

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To demonstrate efficient use of available positions and identify opportunities for improvement in recruitment and selection processes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Quarterly report for MDOT and each TBU from HRIS housed at TSO and spreadsheets completed by TBU Human Resource Offices.

NATIONAL BENCHMARK:

PERFORMANCE MEASURE 2.5

Time to Fill Vacancies

Reducing the time it takes to fill vacant positions will increase MDOT's staffing levels, improving the ability to deliver projects on time and rapidly address emergencies affecting the transportation system.

This is the second quarter of collecting data by TBU. Despite the elimination of the Hiring Freeze Exemption Process, the overall time to fill vacancies increased from 149.6 days in FY17 Q1 to 176.12 days in FY17 Q2.

Average time to fill vacancies decreased in the following TBUs:

MPA – from 167.3 to 161.3 days MTA-Career Service – from 154.6 to 147.2 days TSO – from 211.2 to 182.5 days

Average time to fill vacancies increased in the following TBUs:

MAA – from 121.9 to 225 days MTA-Union – from 45.3 to 114.8 days MVA – from 82 to 82.9 days SHA – From 223.1 to 252.6 days MDTA – from 191.6 to 242.8 days

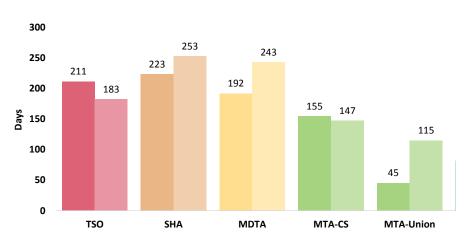
Recruitment process efficiencies are influenced by a variety of sources such as Human Resource staffing levels and fluctuations in the number of vacancies. Additional challenges such as poor applicant response and an increase in the number of vacant positions which require one or more studies of the position description add time to the overall process. MDOT is in the process of procuring a new Human Resource Information System (HRIS) which may allow greater automating of the recruitment process.

In the interim MDOT will continue to look for opportunities to improve, such as:

- Hiring managers may have up to four selectable candidates approved for hire from one set of interviews rather than submitting each candidate for individual approval.
- SHA is piloting a manager's review of career service candidates who do not meet the qualifications for the vacant position to insure candidates are dispositioned appropriately and to help hiring managers refine their selective qualifications for recruitments.

Time to Fill Vacancies

Chart 2.5.1: Average Time to Fill Vacancies by TBU Q1 vs. Q2 FY2017





TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Bill Bertrand State Highway Administration (SHA)

PURPOSE OF MEASURE:

To calculate the percentage of Fixed Asset Units counted during the Annual Physical Inventory of Fixed Assets as an indicator of how well MDOT records, safeguards, and efficiently controls fixed assets.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Data will be collected when the business units conduct annual fixed asset physical inventories.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.6

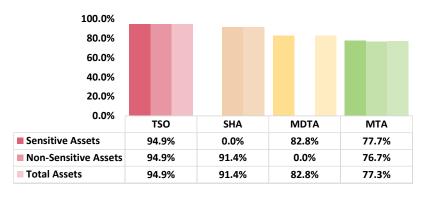
Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets

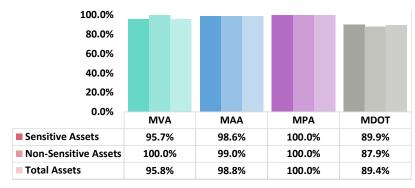
This performance measure is intended to emphasize the importance of stewardship and internal controls with respect to fixed assets owned by each of MDOT's business units. This performance measure reports the percentage of fixed assets counted by each TBU during its annual fixed asset physical inventory versus the number of fixed assets recorded in each business unit's official inventory records.

A regularly-conducted physical inventory of fixed assets ensures accurate information for the management of assets and discourages fraud.

Currently, five of seven business units conduct a full inventory of nonsensitive items once every three years and a full inventory of sensitive items annually. The remaining business units, MAA and SHA, conduct a full inventory of both sensitive and non-sensitive items annually.

Chart 2.6.1: Assests Measured-2015





Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Tony Moore Maryland Port Administration (MPA)

Nicole Katsikides State Highway Administration (SHA)

PURPOSE OF MEASURE:

Provide an overview which shows how TBUs monitor asset management activities.

FREQUENCY:

Annually

DATA COLLECTION METHODOLOGY

Asset inspection condition and asset life-cycle cost analyses are compiled at the TBU level.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.7 Managing Capital Assets

Our customers deserve to know that MDOT is strategically managing its diverse capital assets. Each TBU maintains its physical assets according to policies that minimize asset life-cycle cost while avoiding negative impacts on the delivery of transit services.

MTA, SHA, MAA, MDTA and MPA perform annual bridge inspections per Federal guidelines to assess a rating, which is used to determine if any remedy is required to keep bridges structurally sound.

SHA and MDTA monitor the condition of pavement and road ride smoothness. It is based upon the International Roughness Index (IRI) Pavement Criteria, which is the most commonly used measure worldwide for evaluating and managing road systems. Monitoring is performed using annual road inspections.

MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

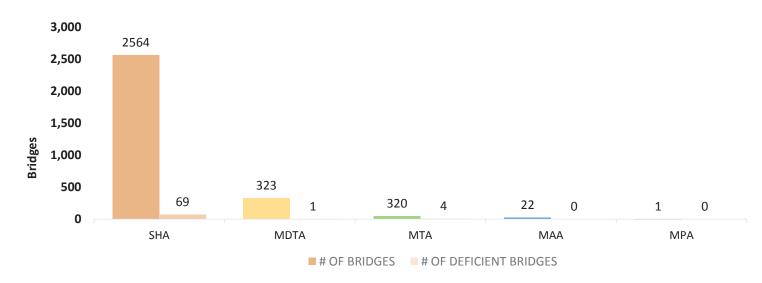
MPA utilizes U.S. Army Corps of Engineers bay channel annual inspection surveys to monitor the dredging depth for shipping access channels to the Port of Baltimore.



PERFORMANCE MEASURE 2.7 Managing Capital Assets

TBU	Active Asset Mgt	Criteria Basis	Assets Managed	Inspection Intervals	Performance Measures
Multiple	Yes	Bridge condition	Structurally deficient bridges	Annual	2.7a - % of structurally deficient bridges
МТА	Yes	Rail condition	Light and heavy rail	Annual	2.7c - % of MTA owned rail in good quality based on FTA ranking guide lines
SHA/MDTA	Yes	Roadway ride condition	Roadways - With acceptable (smooth) rides	Annual	2.7b - % of roadway miles with acceptable (smooth) ride quality
SHA	Yes	Interstate pavement condition (good or not good)	Interstates and non-interstate pavement	Annual	2.7e/2.7f - % of interstate and non-interstate pavement which are in good condition
MPA	Yes	Bay channel dredging priority	Shipping channel depth	Annual	2.7d - % of channel depth inspections

Chart 2.7A.1: Number and Percent of Structurally Deficient Bridges



PERFORMANCE MEASURE 2.7 Managing Capital Assets

Chart 2.7B.1: Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides 2011-2016

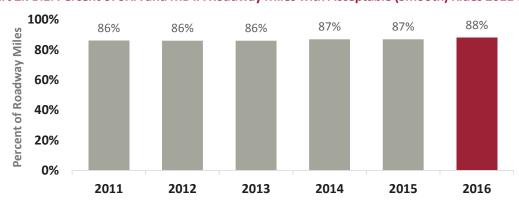


Chart 2.7C.1: Rating of Baltimore Metro Rail in "Good" Condition (>2.5) FY2015-FY2016

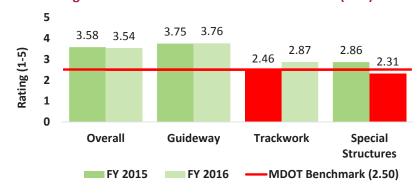
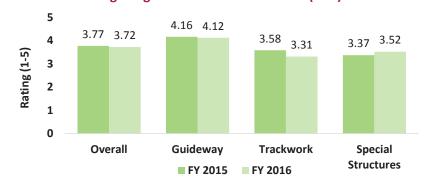


Chart 2.7C.2: Rating of Light Rail in "Good" Condition (>2.5) FY2015-FY2016



PERFORMANCE MEASURE 2.7

Managing Capital Assets

Chart 2.7D.1: Percent of Bay Channel Inspected 2011-2015 94% 100% 84% 80% 60% 50% 40% 20% 0% 2011 **2012 2013 2014 2015**

Chart 2.7E.1: Percent of Interstate Pavement in "Acceptable" Condition 2011-2015

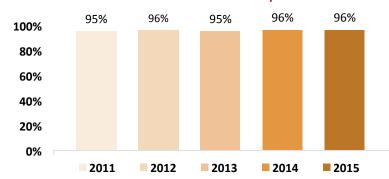
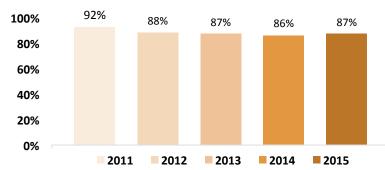


Chart 2.7F.1: Percent of Non-Interstate Pavement in "Acceptable" Condition 2011-2015



Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the timeliness and ability to match the budgets of the procurement process to be more efficient in contracts.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Focus reports MDOT wide showing all active BPO for the fiscal year.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines and budgets for projects. Managers will report the project status accurately and in a timely manner so that problems are identified early and corrective action taken swiftly.

While the trend is improving, we have not addressed underlying issues. The focus must remain on identifying those contracts with issues. The process improvement team is working to understand the systemic problems that prevent contracts that should have been closed in FY2016 from being closed.



PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

Chart 2.8.1: Percent of Blanket Purchase Orders (BPO) Expired FY2013-FY2016

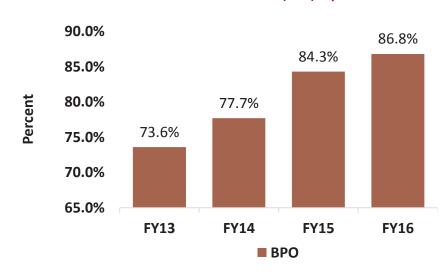
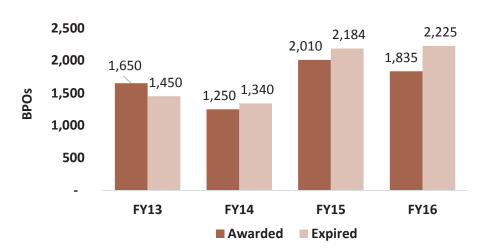


Chart 2.8.2: Number of Blanket Purchase Order (BPO) Awards and Expires FY2013-FY2016



Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To measure (a) the percent of occurrences and (b) the dollar value of unanticipated contract modifications on procurement contracts.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

MDOT wide showing active unanticipated contract modifications equal to or greater than \$1 million.

NATIONAL BENCHMARK: N/A

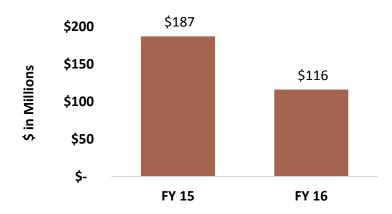
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated **Contract Modifications**

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are minimizing the value and amount of unanticipated contract modifications. In addition, it will encourage project staff to use timely and accurate reports that managers can analyze to examine trends in unanticipated contract modifications.

The amount and value of contract modifications will vary from one TBU to another depending on the type of project. For example, construction contracts, because of the uncertainties due to weather conditions or soil conditions, may require more contract modifications than building maintenance contracts. Similarly, an IT development contract may require more contract modifications than an IT maintenance contract.

Chart 2.9.1: Value of Unanticipated Contract Modifications MDOT-wide FY2015-FY2016



PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

Chart 2.9.2: Percent of Unanticipated Contract Modification Dollars Spent by TBU FY2015-FY2016

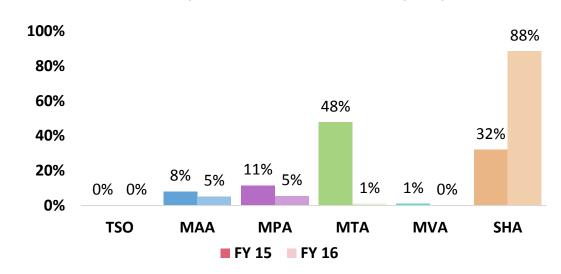
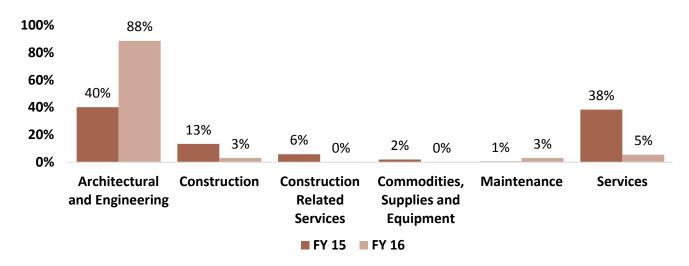


Chart 2.9.3: Percent of Unanticipated Contract Modification Dollars Spent by Category of Work in FY2015-FY2016



Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Laura Getty Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To understand how procurement competition impacts MDOT resources.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data was collected on each TBU procurement contract over \$200,000 during the second quarter of FY 2017. Sole source, emergency, and intergovernmental purchasing procurements were not included, as they have their own processes for determination. Procurement contract ID, number of bids, estimated cost and final contract amount were the data points.

NATIONAL BENCHMARK: N/A

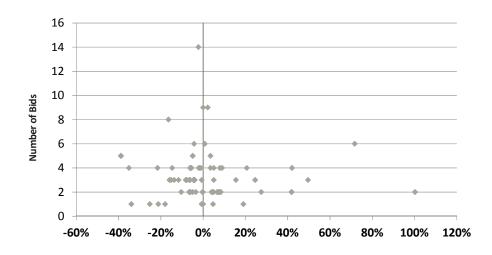
PERFORMANCE MEASURE 2.10 Relationship Between Procurement Competition and Cost

Assessing the impact of procurement competitiveness on contract costs tests the belief that increased competition leads to a better price. It also tests MDOT's ability to accurately estimate and plan for costs. The data trend presents an opportunity to develop an MDOT-wide initiative to track cost estimates on procurement contracts and to evaluate the process for determining estimates.

The data continues to suggest that, as the number of bids increases, procurement contracts come in at or below cost estimate (-100 percent -0 percent). The procurements that increased in cost had a low number of bids. Seventeen percent of procurements this quarter were greater than 10% over estimated cost; 16% of procurements this quarter were greater than 15% under their estimated cost; and procurements greater than 10% over and 15% under both had three average number of bids.

With a year of data now, the process improvement team is examining outliers by TBU and type of contract.

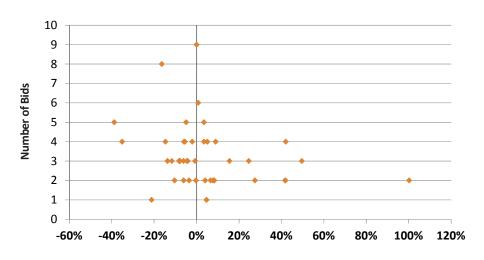
2.10.1: Percent Change from Estimated Cost to **Final Contract Amount FY2017 2Q**



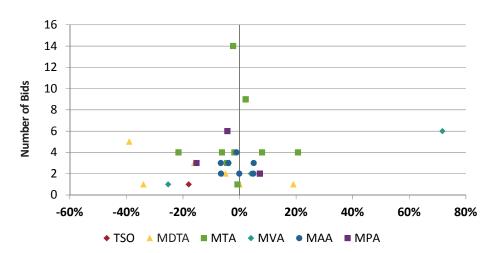
PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

2.10.2 Percent Change from Estimated Cost to Final Contract Amount for SHA FY2017 2Q



2.10.3: Percent Change from Estimated Cost to Final Contract Amount for Other TBUs FY2017 2Q



Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Internal **Audit Findings and Repeat** Internal Audit Findings.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Transparent, informative, and accurate financial reporting is essential for customers to have confidence in MDOT's ability to manage resources. Audits provide a window into current systems and areas for improvement.

Data will be presented by TBU in the number of audit findings and repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid audit and repeat audit findings.

In FY 2013-2016, there were 627 total Internal Findings. The number of Repeat Internal Audit Findings totaled 32 in FY 2013 – FY2016, dealing with materials and supplies management (16 findings), fixed asset inventories (6 findings), promotional expense documentation and authorization (5 findings), MBE subcontractors reporting and compliance reviews (2 findings), and one finding each on the COMAR competitive bid process, overtime approvals not being documented and improper auto title lien documentation.

The materials and supplies management repeat audit findings include such items as segregation of duties, access to storeroom, non-signed receipts, perpetual inventory records not being accurate, documentation issues and inventory turning over less than three times per year.

Thirteen of thirty-two Repeat Internal Audit Findings have been resolved. Of the remaining unresolved nineteen Repeat Internal Audit Findings, thirteen are FY 2016 findings which are unresolved as the audit staff have not confirmed implementation of the changes. The remaining six items are three findings repeated in both FY 2013 and FY 2015 which are scheduled to be resolved Spring 2017.

PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Chart 2.11.1: Number of Internal Audit Findings FY2013-FY2016

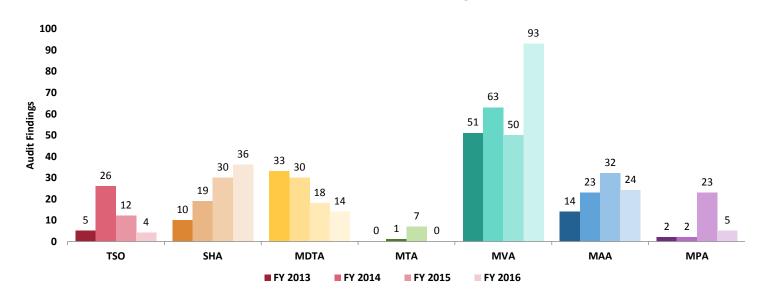


Chart 2.11.2: Number of Total Internal Audit Findings by TBU FY2013-FY2016



Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Chart 2.11.3: Total Internal Audit Findings FY2013-FY2016

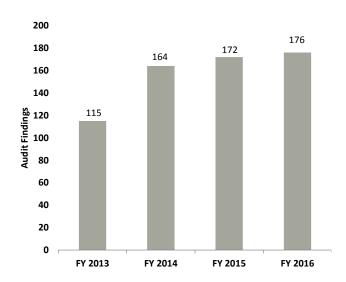
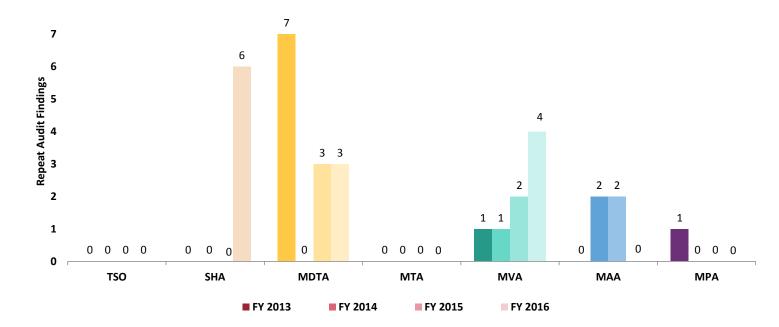


Chart 2.11.4: Number of Internal Audit Repeat Findings FY2013-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Legislative Repeat Audit Findings.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings

Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

The purpose of this performance measure is to track the number of Legislative Repeat Audit Findings. Data will be presented MDOT-wide in the number of legislative repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid Legislative Repeat Audit Findings.

In FY2013-FY2016 there were five total Office of Legislative Audit (OLA) Repeat Audit Findings dealing with proper internal controls over items purchased not being maintained, access to fare collection equipment and money rooms not being controlled, access controls to critical database security logs, files and transactions lacking, a lack of controls over critical virtual servers, and the process for determining the propriety of architectural and engineering contract billings not being comprehensive.

The five Legislative Repeat Audit Findings occurred in FY 2013 – FY 2015 and have been resolved. There were zero Legislative Repeat Audit Findings in FY 2016.

Number of Legislative Repeat Audit Findings

Chart 2.12.1: Number of Legislative Repeat Audit Findings FY2013-FY2016

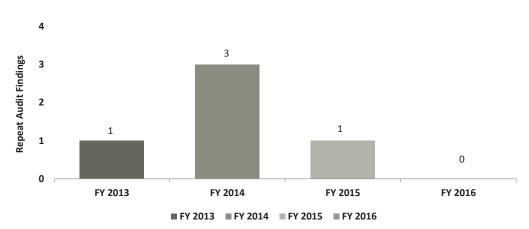
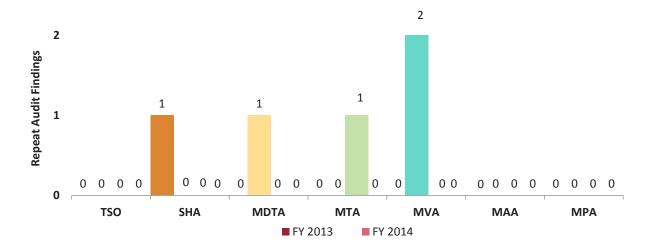


Chart: 2.12.2: Number of Legislative Audit Repeat Findings by TBU FY2013-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Steven Watson The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track the number of fraud hotline complaints investigated by MDOT, as well as the time to respond and develop effective resolutions.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

The TBU Internal Audit Offices provide data compiled into a spreadsheet database tracking fraud hotline complaints by source and investigations still outstanding at the time of reporting.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 2.13

Response to Fraud Hotline Complaints, including Response Time and **Effective Resolution**

MDOT must be responsive to complaints from customers. This performance measure tracks the number, response time, and effective resolution of fraud hotline complaints received or referred to MDOT. During the last quarter of 2016, there were 48 complaints, of which 12 were referred by the Office of Legislative Audits (OLA). MVA maintains a hotline through which 22 complaints were received during the period. Some elements of the data requested of the TBUs were not previously collected making this first collection effort more challenging. Strategically working with the TBUs, the completeness and consistency of the data collected will improve.

Generally, fraud hotline complaints are received by MDOT through two sources – direct contact, or referral by OLA. OLA maintains a widely publicized fraud hotline phone number and receives many complaints; some investigated by OLA, others are referred to the respective State agency to investigate. Direct contacts come via TBU hotlines, direct phone calls or letters.



Response to Fraud Hotline Complaints, including Response Time and Effective Resolution

Chart 2.13.1: Fraud Complaints Received by Source and TBU FY17 2Q

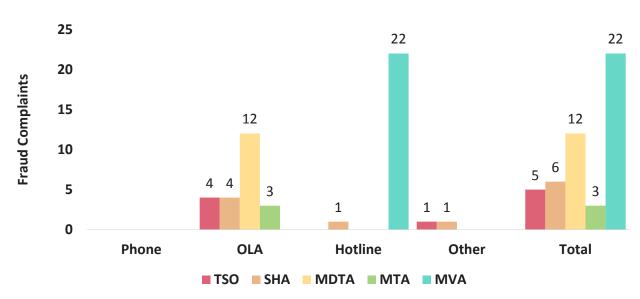
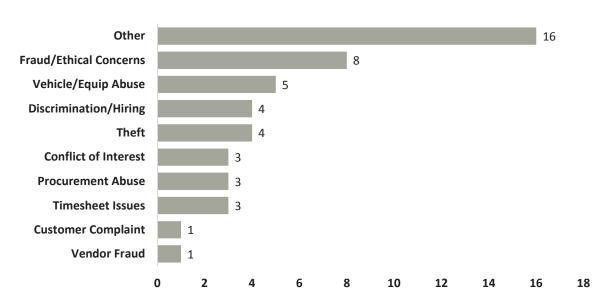


Chart 2.13.2: Fraud Complaints Received by Type FY17 2Q



TANGIBLE RESULT DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

David Maier

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To ensure that when MDOT acquires properties that it takes steps to maintain value of the remaining portions.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

A central MDOT database of properties will be tracked with attention to properties with buildings or other structures.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.14 Rate of Return on Real Property

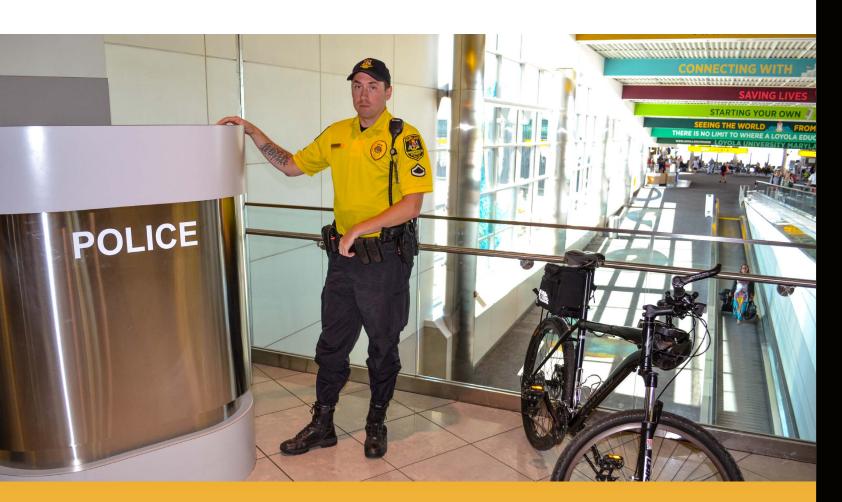
As MDOT acquires real property for a State transportation purpose, portions of those properties are deemed excess and can be sold. To maximize the return on investment, MDOT needs to ensure that when it acquires properties that it takes steps to maintain the value of the remaining unused portion.

A combined inventory and review of all MDOT properties is underway at TSO. Priority is being given to improved properties with buildings and other structures since these properties are most at risk if not maintained properly.



TANGIBLE RESULT #3

Provide a Safe and Secure Transportation Infrastructure



MDOT will not compromise on our commitment to continually improve the safety and security of our customers and partners in everything we do.

RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority (MDTA)

TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority**

PERFORMANCE MEASURE DRIVER:

Bud Frank

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track crime trends and adjust strategies/staffing/ response to protect customers, employees, and State property.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MTA Police and MDTA Police will report directly to Measure Driver. SHA and MVA will compile information and also report directly to Measure Driver. Measure Driver will report to Project Management Team.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

This measure includes all Part I offenses and select Part II offenses as defined in the FBI Uniform Crime Report (UCR). The UCR is a national standard used by law enforcement for the collection and comparison of crime data nationwide. Part I offenses include homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. Part II offenses include less serious offenses including other assaults, vandalism, disorderly conduct, and other sex offenses.

The following charts show annual numbers for Calendar Year 2016 for Part I and Part II crimes. The charts are listed in three categories: MTA, MAA, and the remaining Transportation Business Units combined. The data has remained flat or showed a slight decline over the calendar year.

Law enforcement reviews this data on a weekly and bi-weekly basis for resource allocation and targeted enforcement activities. The data is also used to determine areas of security concern.



Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

Chart 3.1.1: PART I Crimes - Calendar Year 2016

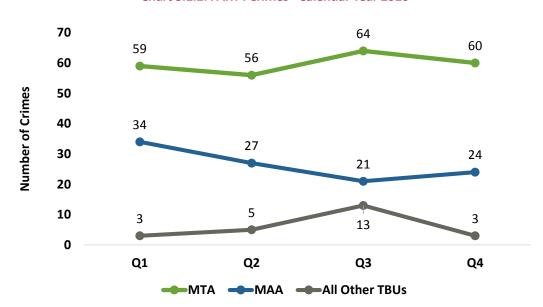
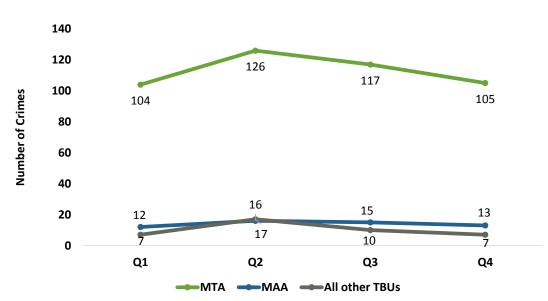


Chart 3.1.2: PART II Crimes - Calendar Year 2016



TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority**

PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons killed in motor vehicle crashes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY

Based on Collected Police Data submitted to Maryland State Police (MSP) through **Automated Crash Reporting** System (ACRS).

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

MDOT strives to implement programs that will increase driver safety by reducing traffic-related crashes that result in serious injuries and deaths. One key measure is tracking the number of fatalities on all roads and analyzing specific causes and related trends. Maryland's Strategic Highway Safety Plan (SHSP) is a comprehensive set of emphasis areas and strategies designed to reduce highway fatalities and serious injuries through the implementation of behavioral and engineering safety countermeasures. It is based on the Toward Zero Deaths approach to reduce fatalities 50% by 2030 from the 2008 baseline of 592 fatalities. Interim reduction targets include 430 in 2015 and 387 in 2020.

Following a decade-long period of significant decreases in traffic-related fatalities, this trend unfortunately has begun to reverse. In 2014, the number of fatalities (443) was the lowest since 1948; but in 2015, the State experienced a 17.6% increase in highway fatalities (521), the largest single-year increase in 30 years. Although preliminary data for 2016 indicate a relative leveling off in highway deaths, these numbers are still far greater than the reductions seen in prior years.

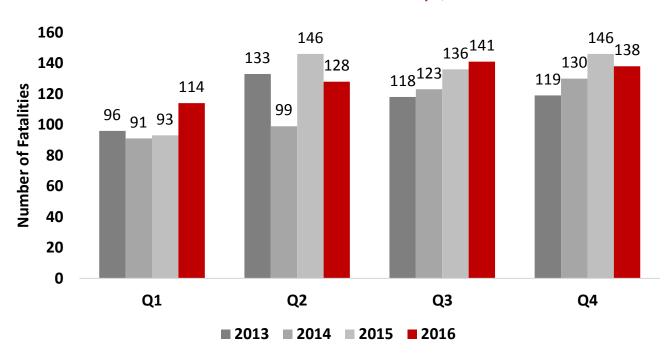
These increased numbers of highway deaths over the past two years also has been experienced nationally as the total number of deaths on our nation's highways increased by 7.2% to 35,092 fatalities in 2015 and is projected to rise another 6% in 2016. A survey conducted of drivers by the National Safety Council indicates that many are comfortable with such risky driving behaviors as speeding, texting behind the wheel and driving after consuming either drugs or alcohol. Additionally, the National Highway Traffic Safety Administration (NHTSA) attributes some of the cause of these fatality increases nationally to relatively inexpensive gasoline, a sharp increase in miles traveled and an improved economy.

Preliminary analysis of 2016 data in Maryland indicates Vehicle Miles Traveled (VMT) increased by nearly 2% - an increase of more than one billion miles driven. This increased exposure, coupled with risky driving behaviors and a failure to use seat belts, are believed to be a significant reason for the increase in highway fatalities in Maryland.

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

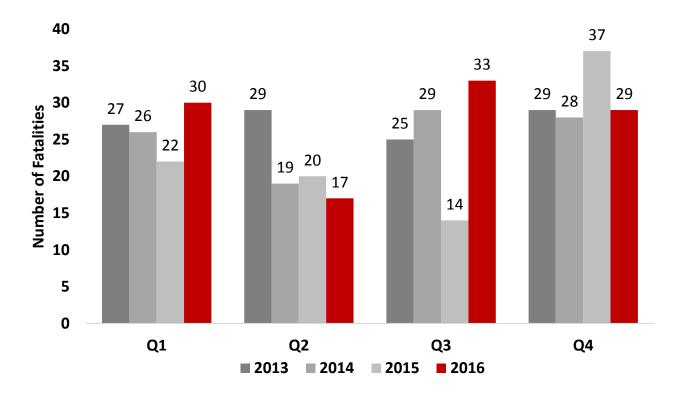
Chart 3.2.1: Traffic Related Fatalities on All Roads by Quarter 2013-2016



PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Chart 3.2.2: Traffic Related Pedestrian Fatalities on All Roads by Quarter 2013-2016



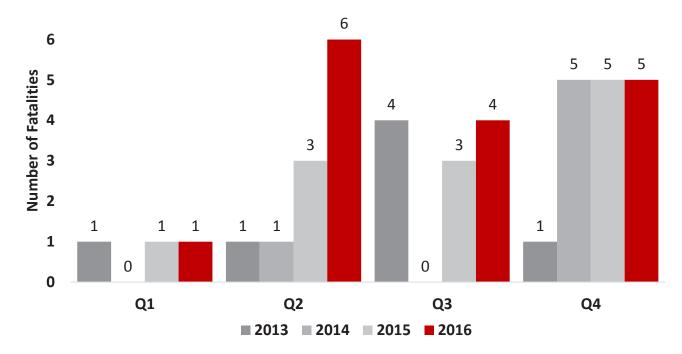
PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Bicyclists typically account for approximately 1% of all fatalities on Maryland highways annually, or on average, about five or six bicycle fatalities every year. This average also has begun to escalate at an alarming rate in the past two years. There were 11 bicycle fatalities in 2015, and preliminary analysis indicates that in 2016, 16 bicyclists lost their lives, composing more than 3% of all traffic-related fatalities on Maryland highways.

Pedestrian deaths typically account for approximately 20% of all traffic-related fatalities. Pedestrian fatalities consistently measure approximately 100 per year. After a decrease in fatal pedestrian crashes in 2015, this trend reversed in 2016, with preliminary analysis indicating that 110 pedestrians lost their lives in traffic-related crashes.

Chart 3.2.3: Traffic Related Bicycle Fatalities on All Roads by Quarter 2013-2016



TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track trends in the number of persons killed in motor vehicle crashes per vehicle miles traveled (VMT).

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY

Traveled (VMT) data based on highway counts on roadways across the state. Fatality data is collected by the MSP through its ACRS. The Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

NATIONAL BENCHMARK:

National Highway Fatality Rate of 1.12 in 2015.

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

The fatality rate is a measure of the number of persons killed in a trafficrelated crash for every 100 million vehicle miles traveled (VMT) on all roads in the State. Through the use of automated highway counters, the VMT is determined monthly by SHA and is compared annually to the number of traffic-related fatalities to determine the rate.

Maryland's traffic-fatality rate compares favorably to the national fatality rate. While the U.S. fatality rate never has dipped below one death per 100 million VMT, Maryland's rate has remained below one for the past seven years. Although this rate had been trending downward, it increased in 2015 to .91 fatalities per 100 million VMT.

This increase corresponds with the significant increase in traffic-related fatalities in Maryland in 2015. Preliminary analysis of 2016 data in Maryland indicates VMT increased by nearly 2% - an increase of more than one billion miles driven. Despite these increases, Maryland's 2015 rate remained below the national rate of 1.12.

Historically, as the nation's and/or state's economy grows, people tend to drive more, increasing both the state's VMT and a person's risk for being in a crash. Opportunities to lower the fatality rate are best achieved by decreasing the number of traffic-related fatalities, as VMT is more difficult to influence.

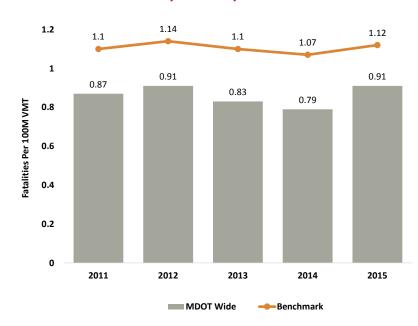


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

Chart 3.3.1: Traffic Related Fataility Rate Maryland v National Benchmark 2011-2015



TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons seriously injured in motor vehicle crashes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Based on Collected Police Data submitted to MSP through ACRS.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

The number of traffic-related serious injuries is a count of persons sustaining an incapacitating injury in a crash. It is determined by a responding police officer investigating the crash and gathered from the injury severity code entered in the crash report. Maryland's Strategic Highway Safety Plan (SHSP) is based on the "Toward Zero Deaths" approach: to reduce fatalities and serious injuries from traffic-related crashes by 50 percent by 2030 from the 2008 baseline. Serious Injury Goals have been set with a similar methodology. Interim Goals include 2015: 3,945; and 2020: 2,939. Strategies for reducing the crashes that cause both fatal and serious injuries are contained within the six main emphasis areas of the SHSP

Over the past 10 years there has been a significant decrease in trafficrelated serious injuries, including a 42 percent decline during a seven year period from 2008 to 2015. In 2016 however the preliminary data indicates a 15% increase of nearly 400 more reported traffic-related serious injuries.

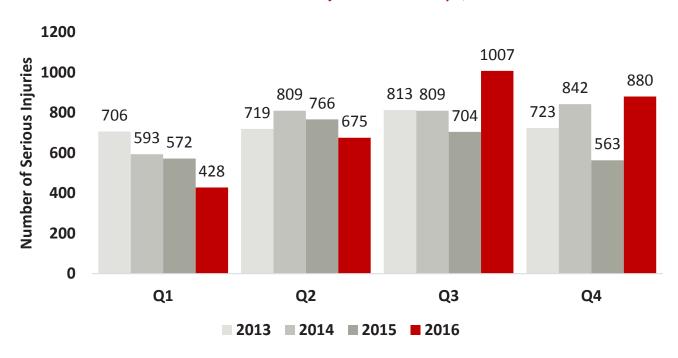
Since fatality data is only a small portion of the entire crash picture in Maryland, serious injuries, and their frequency, help to provide more robust data in determining crash trends across the State. Additionally, striving to minimize crashes that result in serious injuries serves to reduce a motorist's risk for suffering their accompanying life-altering consequences.

Since serious injuries are defined differently from state-to-state there is no national or common benchmark.

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

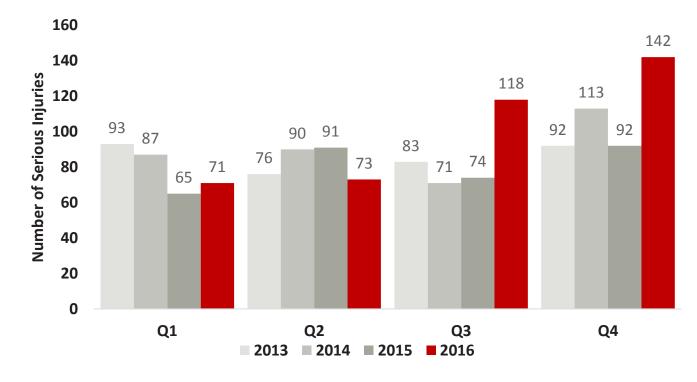
Chart 3.4.1: Traffic Related Serious Injuries on All Roads by Quarter 2013-2016



PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

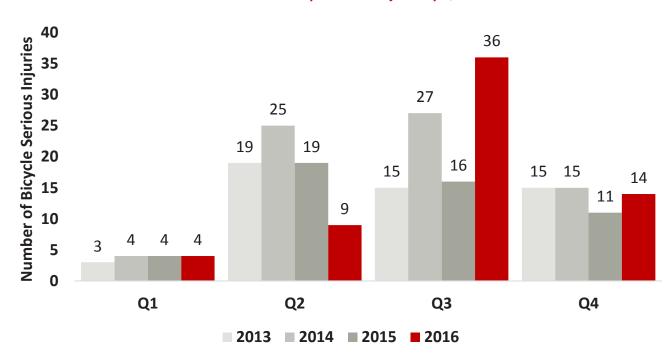
Chart 3.4.2: Traffic Related Pedestrian Serious Injuries by Quarter 2013-2016



PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.3: Traffic Related Bicycle Serious Injuries by Quarter 2013-2016



TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority**

PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track trends in the number of persons seriously injured in motor vehicle crashes per VMT.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

SHA collects VMT data based on highway counts on roadways across the state. The serious injury data is collected by the MSP through its ACRS. The MHSO collects the data from these two agencies. The rate is based on persons seriously injured in crashes per 100 million VMT.

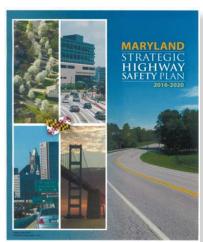
NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.5

Maryland Traffic-Related Serious Injury Rate (Highways)

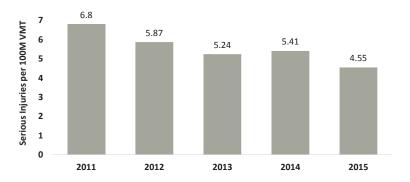
Maryland's serious injury rate is based on a measure similar to the fatality rate (number of persons seriously injured in a traffic-related crash per 100 million VMT). Over the past eight years, both the number of serious injuries and the corresponding rate have dropped dramatically by more than 33%. Maryland's Strategic Highway Safety Plan (SHSP) is based on the Toward Zero Deaths approach, and serious injury rate targets have been set using a similar methodology.



The SHSP contains strategies intended to reduce risky driving behaviors that result in the types of crashes leading to death or serious injury. By addressing and ultimately eliminating these severe crashes, all motorists can enjoy traveling our roadways without the fear of being killed or seriously injured. Death or serious injury is not an acceptable consequence of driving.

As engineering advances have resulted in safer vehicles and highways, and as emergency medical services continue to provide immediate critical care, the numbers of traffic-related serious injuries (and their corresponding rates) have declined significantly in the last several years. Even in 2015, when traffic-related fatalities increased significantly, the number of trafficrelated serious injuries and its corresponding rate continued to decline.

Chart 3.5.1: Maryland Traffic Related Serious Injury Rate 2011-2015



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

PERFORMANCE MEASURE DRIVER:

Gina Watson Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To track trends in seat belt use in Maryland and assess how Maryland ranks against the national rate as an indicator of how well seatbelt use is encouraged.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Observational Survey conducted by MVA MHSO.

NATIONAL BENCHMARK:

Nationwide usage rate provided by NHTSA reached 90.1 percent in 2016.

PERFORMANCE MEASURE 3.6 Maryland Seat Belt Usage Rate

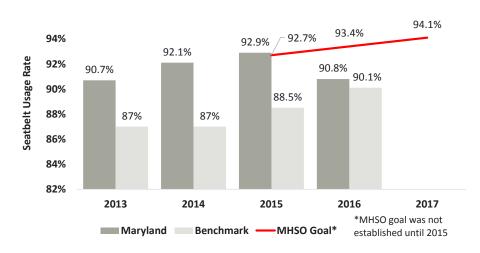
The use of seat belts by Maryland drivers greatly reduces the severity of personal injury and occupant fatalities in crashes. States such as Maryland with primary and secondary seat belt enforcement laws exhibit higher seat belt usage rates.

Maryland's seat belt usage rate is collected by an observational survey methodology approved by the National Highway Traffic Safety Administration (NHTSA). Maryland's

2016 seat belt survey usage rate was 90.8 percent versus 92.9 percent in 2015. However, NHTSA shows a national increase in belt use at 90.1 percent in 2016 versus 88.5 percent in 2015.

The Maryland Highway Safety Office (MHSO) goal for seat belt usage for 2017 is 94.1 percent. Maryland will continue to be a strong supporter of the Click-it or Ticket campaign with incorporation of dynamic public awareness programs. In addition, law enforcement agencies will continue to be educated on the importance of seat belt enforcement.

Chart 3.6.1: Seat belt Usage Maryland vs Benchmark 2013-2016



TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

PERFORMANCE MEASURE DRIVER:

Cedric Ward State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track and assess the performance of MDOT's incident management programs to respond to customer needs while traveling.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data is collected from centralized reporting to CHART for roadway data. MPA and MAA data are collected individually.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, Maryland State Police (MSP), and numerous other Federal, state and local agencies. CHART provides assistance to disabled motorists and responds to traffic incidents throughout Maryland. In the Baltimore and Washington metropolitan areas, patrols are operated 24 hours per day, seven days per week. In addition to services on highways, the MPA and MAA provide assistance to their customers who experience vehicle issues. These services provide an added value to MDOT customers who might otherwise need to rely on paid service providers. Customers can access this service by dialing *77 or through the normal 911 emergency dispatch. Additionally, CHART provides real-time traffic conditions through its website: http://www.chart.state.md.us/.

For the 2016 calendar year, MDOT has helped 80,111 disabled motorists. There was an increase in assists and responses between the second and third quarters MDOT-wide.

Efforts are underway to advertise and award the next phase of Closed Circuit Television Cameras (CCTV) and Dynamic Message Boards (DMS) to further assist with traffic monitoring, incident detection, and providing motorists with information to avoid delays and congestion.

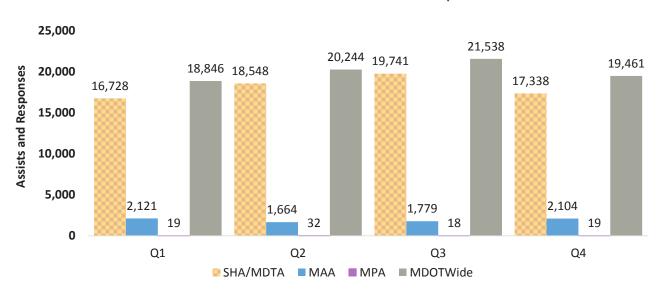


Provide a Safe and Secure Transportation Infrastructure

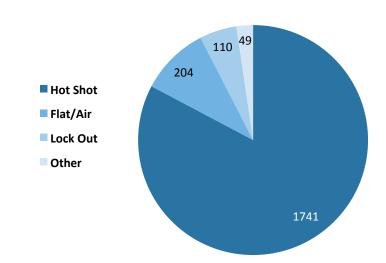
PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

Chart 3.7.1: CY 2016 Number of Assists and Responses



3.7.2: MAA Customer Assists by Type Q4 2016



TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority**

PERFORMANCE MEASURE DRIVER:

Cedric Johnson Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track injury reporting trends at MDOT TBUs.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Collected by Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies) and sent to agencies as a report.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)

This measure is used for analysis and the development and implementation of risk mitigation strategies. This is the starting point data source for maintaining a safe work environment.

This measure includes all first reports of injury (FROI) to the Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies). This is a 2nd quarter comparison of FY2016 versus FY2017. Data indicates a slight decrease during FY2017 in the number of employee injuries reported.

Strategies for reducing employee injuries include the timely submission of injury reports. The TBU Risk Managers meet quarterly to review data and discuss useful strategies.

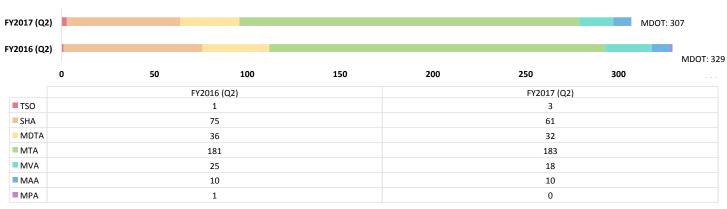


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.8

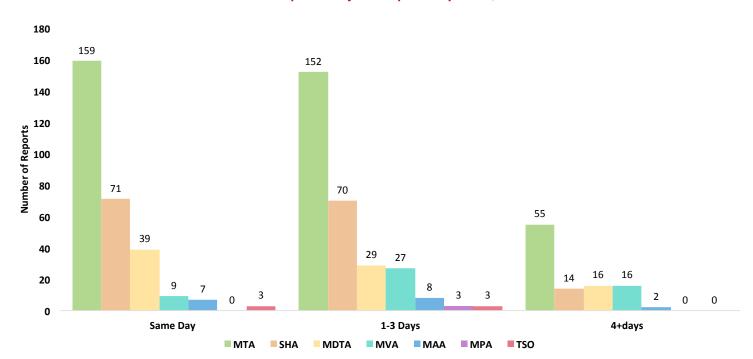
Number of Employee Injuries Reported (First Report of Injury)

Chart 3.8.1: Number of First Report of Injuries by TBU Q2 FY2016 vs. Q2 FY2017



Number of Injuries

Chart 3.8.2: Speed of Injuries Reported by TBU Q2 FY2017



TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

PERFORMANCE MEASURE DRIVER:

Cedric Johnson Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track, trend, and mitigate lost work days.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data is collected through multiple MDOT timekeeping systems.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Employee safety is a top priority to MDOT. However, injuries do occur on the job and work days are sometimes lost as a result. Lost work days reduce the effectiveness of TBUs and are an indirect measure of employee health and welfare.

This measure only includes lost work days due to on the job, work-related injuries (Note that lost work days are associated with the number of injuries reported in Performance Measure 3.8). Factors affecting this measure include varying work conditions and environments, and differing risk profiles amongst employees across TBUs, as well as inconsistent leave coding policies and practices across MDOT's payroll systems.

This is a 2nd quarter comparison of FY2016 versus FY2017. Data indicates a FY2017 increase in the number of lost work days due to injuries. It is important to note that there are varying work environments, inconsistent employee injury leave policies and two (2) separate payroll systems.

Safety practices such as personal protective equipment, safety training, and safety policies are employed to reduce employee injuries and lost work days.

PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.1: Number of Employees Coding LY (Work Injury Leave) by TBU Q2 FY2017

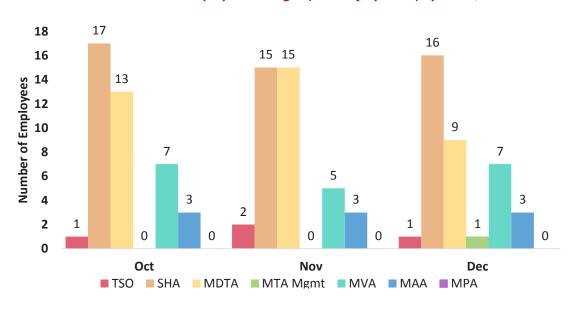
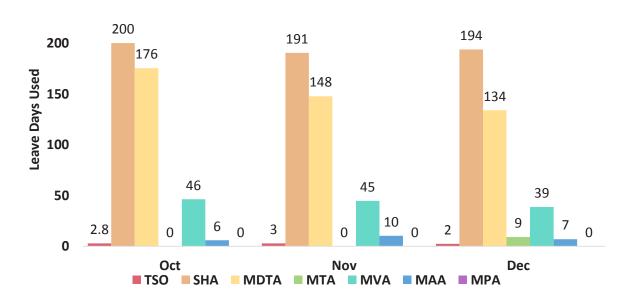


Chart 3.9.2: Number of Work Injury Leave (LY) Days Used by TBU Q2 FY2017



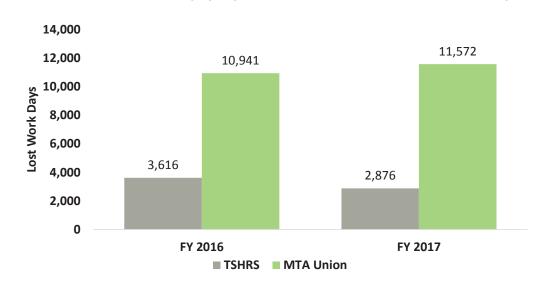
PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.3: MTA Union Lost Work Days Due to Injuries FY 2013 - 2017 July-Dec



Chart 3.9.4: Number of Work Injury Days Used TSHRS and MTA Union FY2016-2017 July - Dec



TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority**

PERFORMANCE MEASURE DRIVER:

Phil Thomas

Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track customer incidents within MDOT facilities where customers are rendered a service to ensure our customers that MDOT facilities are safe for our customers.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

TBUs track using their existing processes and report to the driver via phone or email.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 3.10

Number of Customer Incidents at **MDOT** Facilities

MDOT has programs in place to ensure the safety and security of its facilities and its customers because TBUs provide many services to the public. MDOT is committed to providing a safe and secure environment to our customers, which is why measuring unplanned events that may or may not result in injury within enclosed buildings that provide a service (i.e MVA centers, Stop in Centers) is important.

This is still a new measure and MDOT is working with each TBU to ensure that customer incidents are being tracked. This measure has also allowed for some TBUs to implement new programs and processes to ensure customer incident tracking is occurring. An example is identifying and tracking the number of incidents at MDOT facilities where business is conducted. Identifying and tracking incidents and associated trending offers data for implementing corrective actions; thereby reducing hazards and minimizing risk for MDOT and customers.

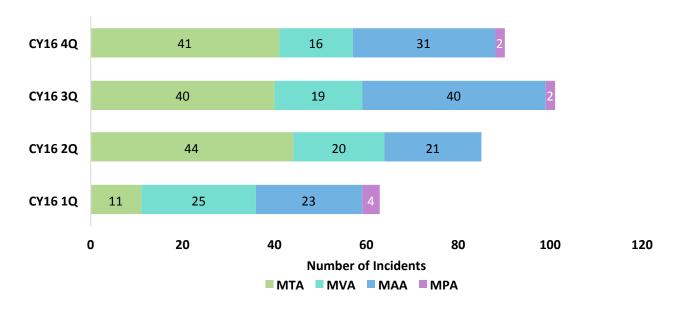
It is important for MDOT to provide customers safe areas and facilities to complete their day-to-day transportation needs.



PERFORMANCE MEASURE 3.10

Number of Customer Incidents at MDOT Facilities

Chart 3.10.1: Number of Customer Incidents in MDOT Buildings 2016



Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT #4

Deliver Transportation Solutions and Services of Great Value



MDOT will deliver transportation solutions on time and within budget. The Department will use strategies to ensure that the transportation solution meets the needs of our customers and eliminates unnecessary costs.

RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Terri Lins

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To gauge the accuracy of capital project estimates to manage the Departments Capital Program more efficiently.

FREQUENCY:

Annually (In October)

DATA COLLECTION METHODOLOGY:

Through the Capital Program Management System (CPMS); the CTP; TSO & TBU's Procurement Offices.

NATIONAL BENCHMARK:

+/- 5% This mirrors the benchmark as reported by Nebraska's Dept. of Roads, Fiscal Responsibility for the Accuracy of Project Estimates. Further, while MODOT has not specified a benchmark per se, they use Nebraska's 5% as the bench for the best.

Note: this benchmark applies to capital construction projects. Thus far, & with extensive research, we have been unable to find a benchmark for IT projects.

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

This Performance Measure fosters more accuracy and better budget management of the State's limited transportation funding. Accurate estimating enables MDOT to provide better services to its customers, whether it is infrastructure improvements to State roadways and bridges; increasing and retaining the commerce going in and out of the Port of Baltimore; attracting and retaining airlines and travelers at BWI Marshall; providing more alternative service options to Maryland citizens to conduct their MVA transaction remotely; or improving transit services throughout the State.

Given the diverse differences between construction and IT projects, we have separated these in to two categories with specific budget parameters:

- \$ 1M+ Construction Type Projects: SHA, MDTA MPA, MAA and MTA
- \$400K+ IT Projects: TSO and MVA

For FYs 2014, 2015 and 2016, the range in variance between estimated project budgets and final project awards was from 4.7% to 7.6%. While the range is within the +/- 5% and the estimates vs award are very good, the goal is to continue working on strategies to obtain the +/- 5% consistently.

To improve the outcomes of this measure, MDOT is engaged in the following activities:

- Team expansion with SMEs from each TBU
- Usage of estimating manual
- Creation of excel spreadsheet to ensure consistency in gathering data for PM 4.1 - PM 4.3
- Clarifying definitions with TBUs
- Modified dataset for construction contracts to \$1M (MAA, SHA, MDTA, MPA and MTA)



PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.1: Varriance Percentage- SHA, MDTA 2014-2016

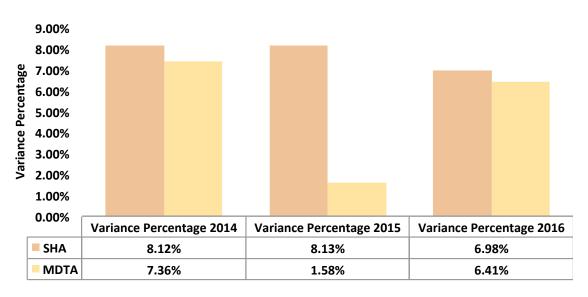
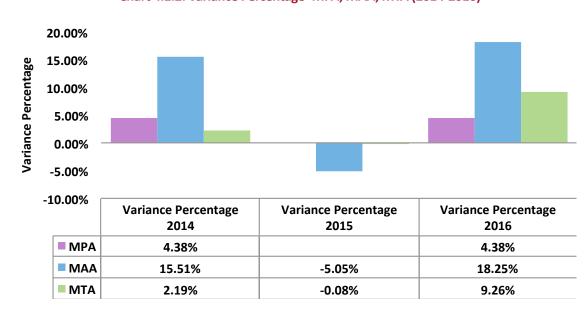


Chart 4.1.2: Variance Percentage- MPA, MAA, MTA (2014-2016)



PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.3: Variance Percentage- TSO, MVA (2014-2016)

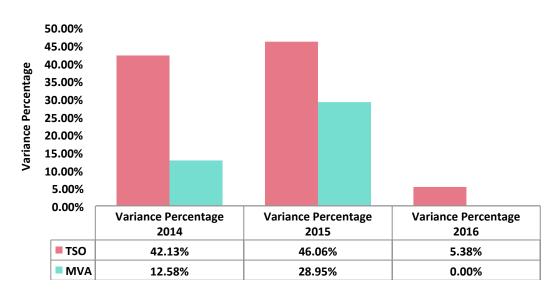
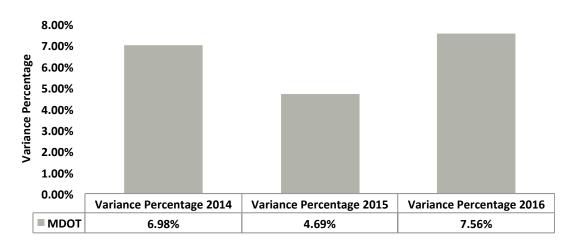


Chart 4.1.4: Variance Percentage- MDOT (2014-2016)



Deliver Transportation Solutions and Services of Great Value

Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Brian W. Miller Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To measure the difference in contract amount from Notice to Proceed (NTP) to final contractor payout. This is done to determine the effectiveness of contract management.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Collect data from MDOT TBUs for Fiscal Years 2013 to 2017. Data will reflect contracts that closed out in each respective Fiscal Year. Data will be reflected in a bar graph for each Fiscal Year.

NATIONAL BENCHMARK:

2 % benchmark.

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

It is important to assess how well MDOT manages the budgeted and awarded amount during the duration of Department contracts. This is done to ensure MDOT is getting what was paid for and not adding unnecessary or unbudgeted costs to our transportation projects. This will facilitate better contract performance and better management of contracts which will add overall value to the project and ensure worthwhile expenditures of taxpayer dollars.

TBUs will monitor contracts and justify any overages through contract changes and justifications for those changes which have been occurring.

At present all TBUs are maintaining contracts below 2%. The reason for any TBU posting overages of 2% is due to a contract that experienced unexpected contract changes due to unforeseen developments during the course of construction. The changes have been justified by the respective TBU.

Individual TBUs may not have data from a fiscal year if no contract(s) closed during the respective fiscal year.

Should issues arise with any TBU where all contracts are showing overages well above 2%, a more refined strategy development will take place to determine the causes of these contract management issues and corresponding strategies to correct the problem(s).

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.1: FY 2013 Percent of Change for Finalized Contracts

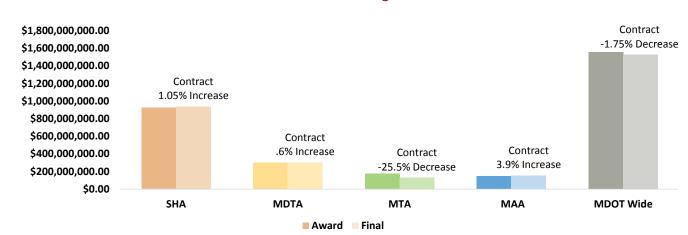
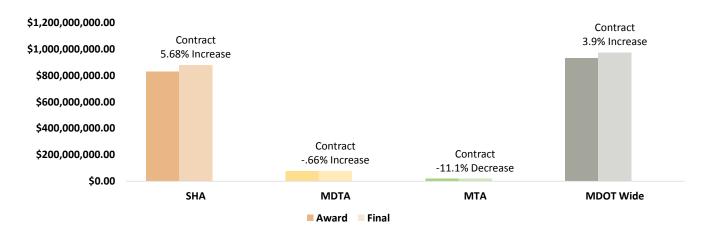


Chart 4.2.2: FY 2014 Percent of Change for Finalized Contracts



PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.3: FY 2015 Percent of Change for Finalized Contracts

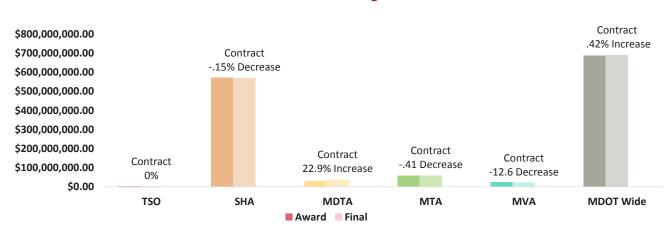
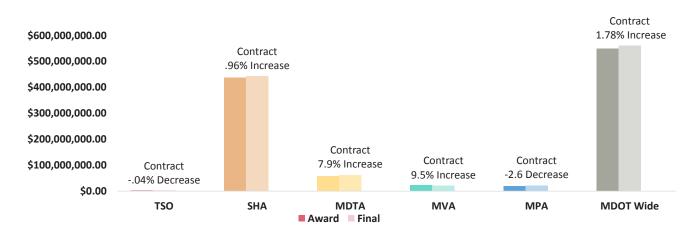


Chart 4.2.4: FY 2016 Percent of Change for Finalized Contracts



TANGIBLE RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Bill Appold The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To determine if MDOT is efficiently managing and delivering contracts and services.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Information will be provided by the MDOT Offices of Construction, Planning and Finance.

NATIONAL BENCHMARK: 87%

PERFORMANCE MEASURE 4.3

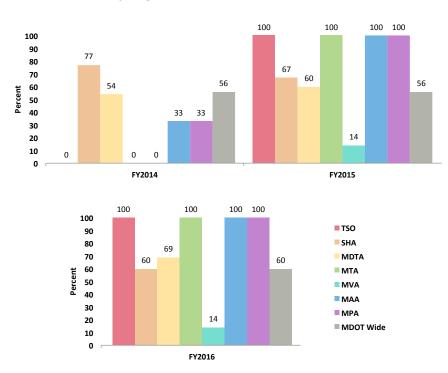
On-time Services and Solutions: Percent of Projects Completed by Original Contract Date

When MDOT awards a contract or agrees to provide a service, it establishes a commitment date which is the date the contract or service begins providing benefits to MDOT's stakeholders.

The purpose of this performance measure is to track MDOT's accuracy in estimating if contracts and services are completed and open to service by the commitment date specified in the contract. The performance measure will also determine if there are common factors that make contracts go over their budgeted time and whether these factors can be mitigated.

Overall MDOT increased the percentage of contracts completed in a timely basis from 56% in FY 14 and FY 15 to an FY 16 total of 60%. This is due to an increase in timely completions from MDTA and also a large increase in total contracts closed by SHA increasing the weight of their overall percentage.

Chart 4.3.1: On Time Services and Solutions: Percent of Projects Completed by Original Contract Date FY2014-FY2016



TANGIBLE RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Pat Keller Maryland Transit Administration (MTA)

Jim Harkness **Maryland Transportation Authority**

Wayne Schuster Maryland Aviation Administration

PURPOSE OF MEASURE:

To track the average cost of common transportation services and solutions, in order to make decisions as to where to reduce costs, as appropriate.

FREQUENCY:

Annually (in January and July)

DATA COLLECTION METHODOLOGY:

Through the CPMS; The CTP and MDOT Capital Budget, Finance and Procurement Offices.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 4.4

Average Cost of Common Transportation Solutions and Services

It is MDOT's responsibility to provide transportation solutions and services to the public that are of great value.

The purpose of these measures is to track, access, and analyze data that will help reveal solutions for reducing the cost of transportation services. Tracking data that is grouped by shared services across business units will allow comparison across TBUs, and also insight into ways to reduce the cost of services to the public.

Performance measure 4.4 has 10 separate measurements. These measurements include minor and major road resurfacing cost, interstate road resurfacing cost, bridge replacement cost and major bridge redecking cost. Other measurements include operating cost per passenger trip, operating cost per revenue vehicle mile, passenger trips per revenue vehicle mile, farebox recovery and cost per transaction.

Tracking of these measures is based upon actual costs associated with contracts issued for various road and bridge projects. Because data for these projects is tracked annually, in any given year there may not be an award for this type of project as can be seen from some of the MDTA data. Regardless, the data will provide customers with insights into how Maryland transportation projects compare to national averages.

Benchmarks are sought to gauge how Maryland solutions and services compare with national averages as well as who is considered the best in this category. Based on year-to-year data comparisons, the goal is to identify ways to reduce costs to the citizens of Maryland.

PERFORMANCE MEASURE 4.4A

Minor Road Resurfacing Cost

4.4A.1: Minor Road Resurfacing Cost FY2013-FY2015



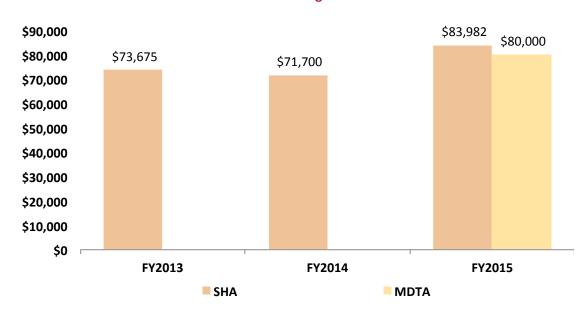
PERFORMANCE MEASURE 4.4B AND C

Major Road Resurfacing Cost and Interstate Resurfacing Cost

4.4B.1: Major Road Resurfacing Cost FY2013-FY2015



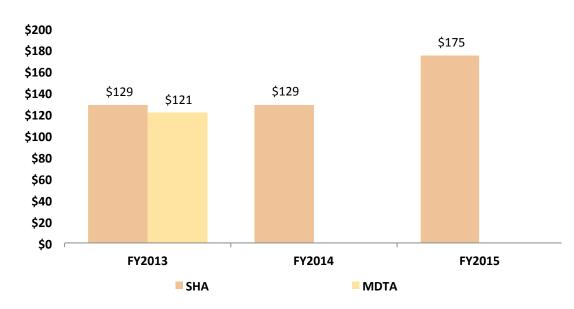
4.4C.1: Interstate Resurfacing Cost FY2013-FY2015



PERFORMANCE MEASURE 4.4D AND E

Average Bridge Replacement Cost and Average Bridge Redecking Cost

4.4D.1: Average Bridge Replacement Cost FY2013-FY2015



4.4E.1: Average Bridge Redecking Cost FY2013-FY2015

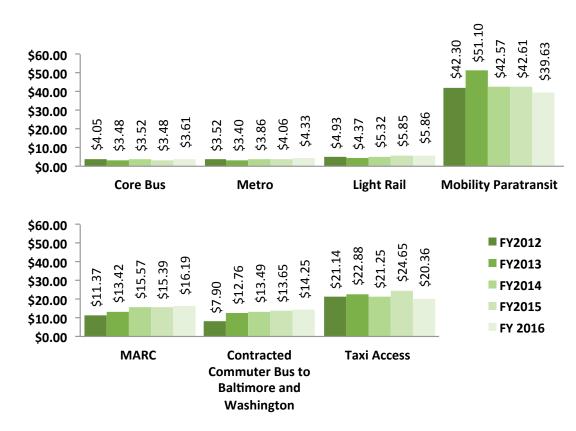


PERFORMANCE MEASURE 4.4F

Average Cost of Common Transportation Solutions: Operating Cost Per Passenger Trip (MTA)

Operating cost per passenger trip is an indication of how effectively and efficiently the MTA is producing service given the operating costs. Ideally, a lower operating cost per passenger trip demonstrates the ability to move passengers in an efficient and effective manner. Benchmarks: Core Bus \$4.89, MTA \$3.90; Metro \$3.16, MTA \$3.81; Light Rail \$5.60. MTA \$5.28; Commuter Bus \$11.10, MTA \$13.30; MARC \$14.80, MTA \$14.86.

Chart 4.4F.1: Operating Cost Per Passenger Trip FY2012-FY2016



PERFORMANCE MEASURE 4.4G

Average Cost of Common Transportation Solutions: Operating Cost Per Revenue Vehicle Mile (MTA)

Operating cost per revenue vehicle mile is an indication of the cost effeciency of the MTA in producing service given operating costs and scheduling of service. Ideally, when a transit vehicle is in operation, the goal is to be in revenue service vs. deadhead or repair. A lower operating cost per revenue vehicle mile demonstrates an efficient, well scheduled service and maintained fleet. Benchmarks: Core Bus \$13.83, MTA \$14.74; Metro \$12.49, MTA \$11.00; Light Rail \$17.49, MTA \$13.80; Commuter Bus \$8.42, MTA \$9.88; MARC \$23.21, MTA \$23.23.

Chart 4.4G.1: Operating Cost Per Revenue Vehicle Mile FY2012-FY2016

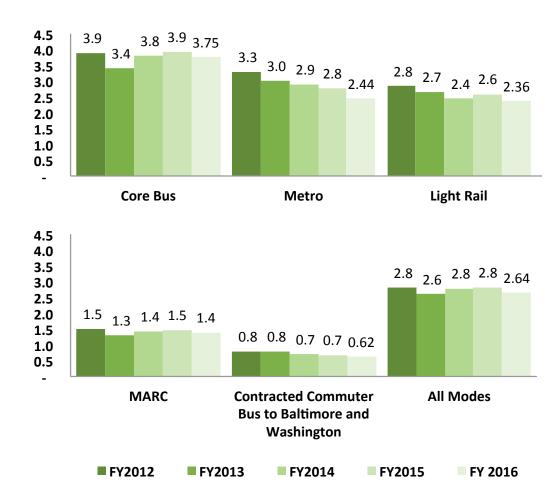


PERFORMANCE MEASURE 4.4H

Average Cost of Common Transportation Solutions: Passenger Trip Per Revenue Vehicle Mile (MTA)

Passenger trips per revenue vehicle mile measures the effectiveness of the cost of operating transit per passenger carried. The scheduled service should carry as many passsengers as practical without overcrowding the service. Benchmarks: Core Bus 3.14, MTA 3.8; Metro 4.62, MTA 2.9; Light Rail 3.1, MTA 2.6; Commuter Bus .76, MTA .7; MARC 1.62, MTA 1.6.

Chart 4.4H.1: Passenger Trips Per Revenue Vehicle Mile FY2012-FY2016

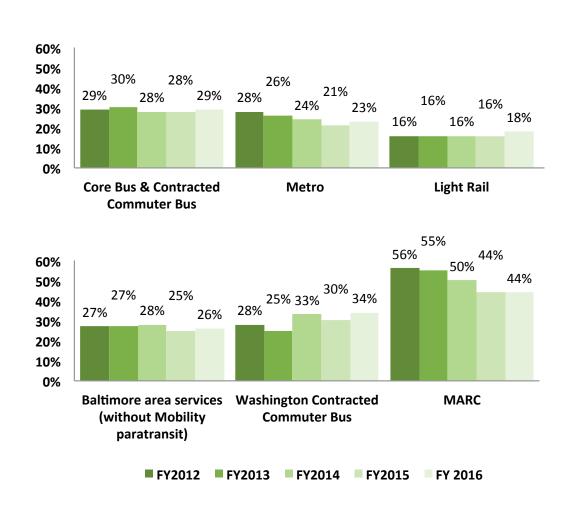


PERFORMANCE MEASURE 4.41

Average Cost of Common Transportation Solutions: Farebox Recovery Ratio (MTA)

Farebox recovery ratio is a metric that measures the amount of operating costs recovered through fares. Various factors affect the recovered operating costs such as fare price, ridership levels, and operating costs such as labor, fuel, and repair. State law mandates that MTA achieve a 35 percent Farebox Recovery Ratio.

Chart 4.4I.1: Farebox Recovery Ratio FY2012-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4J

Average Cost of Common Transportation Solutions: Cost Per Transaction (MVA)

Cost per transaction is based on the total Operating Expense compared to the total number of Customer Transactions. The Operating Expense is inclusive of salaries and wages, including overtime. Operating expenses also include MVA costs to provide driver's licensing, vehicle registration and titling customer services.

The ways in which MVA provides its services to its customers is a factor in the costs per transaction. For example, IT system enhancements (introducing alternative service delivery options to customers) offer higher levels of convenience and customer satisfaction. Recent service improvements include the ability for a customer's vision provider to submit vision exam results electronically to MVA for licensing purposes, thus allowing some customers to renew their license via the web in lieu of standing in a license renewal line. Other such innovative service delivery using computer-based methods are included in the costs per transaction.

Trends in cost per transaction can vary when new technologies are implemented. Initial technology rollout costs tend to create a spike in costs, but after implementation, cost per transaction usually stabilizes and then declines. Other factors included in cost per transaction include the number of transactions required to complete customer service or product requests; increases in vehicle sales, which can be more costly to process (full titling transactions); and changes in driver's licensing laws requiring more time-consuming customer identification screening.

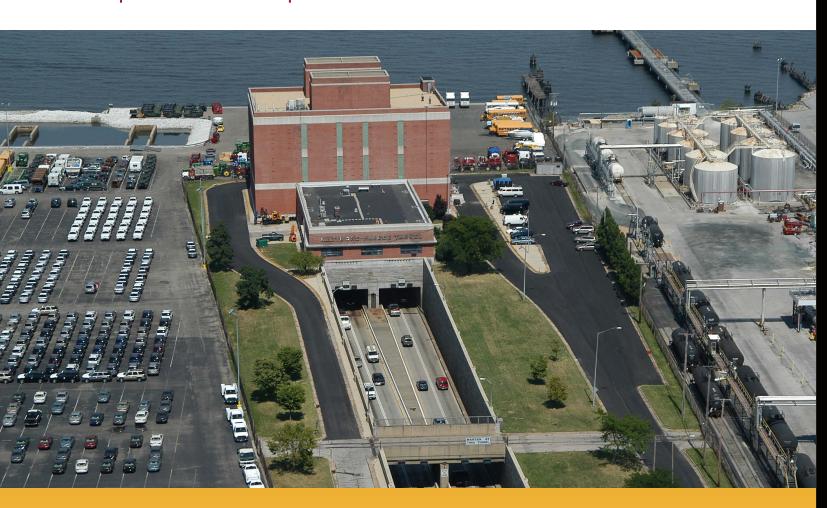


Chart 4.4J.1: Average MVA Cost Per Transaction FY2013-FY2016



TANGIBLE RESULT #5

Provide an Efficient, Well-Connected Transportation Experience



MDOT will provide an easy, reliable transportation experience throughout the system. This includes good connections and world class transportation facilities and services.

RESULT DRIVER:

Phil Sullivan Maryland Transit Administration (MTA)

TANGIBLE RESULT DRIVER:

Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Scott Jacobs

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To assess average wait time at

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Verification of average wait times at facilities for services based on MDTA reporting the percentage of tolls collected via cash payment at toll facilities.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 5.1A

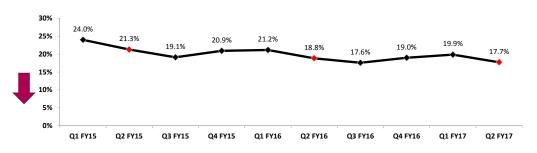
Reliability of the Transportation Experience: Percentage of Tolls Collected by Cash

Cash tolls cause more congestion at toll facilities because wait times at these tolls are longer. Customers expect limited congestion and minimal wait times, particularly at paid toll facilities. A decrease in this measure indicates more free flow traffic using electronic means of payment.

Currently MDOT is trending positively, as the measure has been decreasing over the past year. As of FY 2017-Q2 MDOT was at 17.72% of tolls collected by cash. This is a decrease of 2.14% from FY2016-Q2.

MDOT continues to market electronic toll collection and lanes and signage are being reconfigured in the current tri-message sign project.

Chart 5.1A.1 - Percent of Tolls Collected by Cash for All Mixed Facilities by Quarter FY2015-FY2017



Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

David Thomas Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To assess average turn time at facilities to ensure an efficient transportation experience for the customers.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Verification of average turn times at port facilities for services.

NATIONAL BENCHMARK:

There is not a national benchmark. However, in researching Trade and Industry **Publications and Trucking** Associations, 45 minutes can be established as an efficient turn time.

PERFORMANCE MEASURE 5.1B

Reliability of the Transportation Experience: Average Truck Turn Around Time per **Container Transaction**

This performance measure is important because customers of MDOT Port facilities expect reasonable turn times to obtain needed services. The reliability of the transportation experience is assessed through average truck transaction turn around times at facilities to ensure that customers have an efficient transportation experience. This measure will allow MDOT to monitor the service provider and improve turn around times at container facility. The data will be reported and reviewed annually.

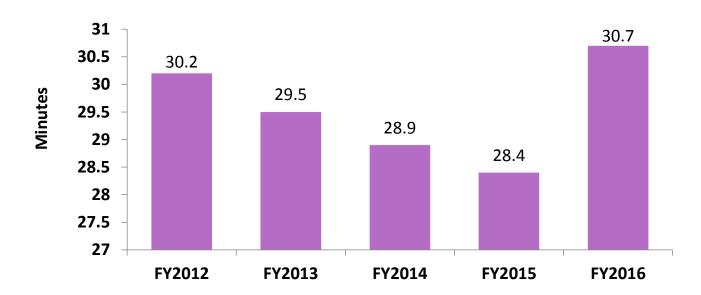
MPA is reporting on container transaction turn around time handled by truck at Seagirt Marine Terminal by fiscal year. The gate turn around time is determined by the accumulated time that each truck remains on the terminal to complete its transaction (gate-in and gate-out). The primary objective of the Port is to maintain industry leading turn around times of 45 minutes or less. Turn times have increased slightly in FY2016 from 28.4 minutes to 30.7 minutes per transaction. This turn around time remains well below industry standards. The increase is directly attributed to elevated container volumes being handled at the terminal due to the Panama Canal expansion allowing for larger vessels to call at the facility.

Continual improvement of the trucker experience is important to MPA as well as the terminal operator. MPA and terminal operator are committed to improving the truck turn around times through streamlined gate processes, terminal infrastructure investments, extended gate operating hours, deployment of new technologies and investments in new container handling equipment. In addition, maintaining active lines of communication with the Maryland Motor Truck Association, Longshoreman's Association, Customs and Border Protection and United States Coast Guard all are very effective ways to eliminate unnecessary and unwarranted delays in the processing of trucks.

PERFORMANCE MEASURE 5.1B

Reliability of the Transportation Experience: Average Truck Turn Around Time per Container Transaction

Chart 5.1B.1: Average Annual Truck Turn Around Time per Unit (Box) at Seagirt Marine Terminal FY2012-FY2016



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

David Thomas Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To assess average wait time at MVA facilities.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Verification of average wait times at MVA facilities for services.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

This performance measure is important as customers of MDOT expect reasonable wait times to obtain needed services and products. For performance measure 5.1C, the reliability of customer transportation experiences was assessed through monitoring of average wait times at MDOT MVA facilities. The data will be reported and reviewed quarterly.

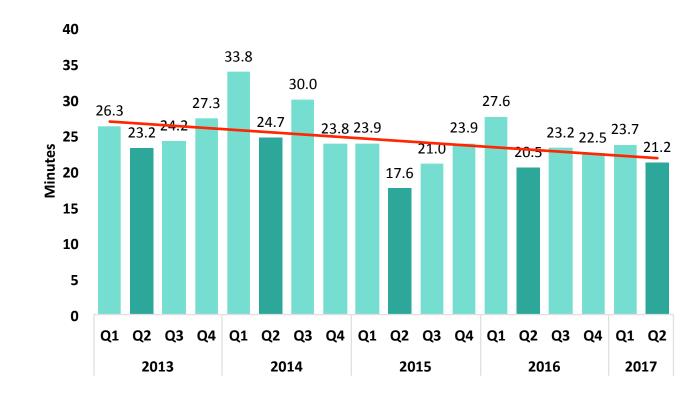
Currently, MVA reports the average wait time for customers to obtain services and products at all branch offices. The statewide average wait time goal for FY2017 is 21.7 minutes. During the current Q2 reporting period, MVA recorded an average statewide wait time of 21.2 minutes which was below the stated goal.

Initiatives implemented include the central issuance process for all driver's licenses (DL) and identification cards (ID), whereas customers now receive their DL/ID in the U.S. mail and not in a branch office at the time of service. In addition, the MVA began to electronically screen all customers at the Customer Information Counter to identify if they could conduct their services immediately at a kiosk or online as opposed to waiting inline for a customer service representative. These new initiatives assisted in keeping wait times at a minimum during MVA's busiest time period.

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

Chart 5.1C.1: Average Wait Time (MVA) FY2013-FY2017



Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Robert Pond Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess the percent of on-time performance of transportation service by mode to ensure a more reliable transportation experience for customer.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

Varies by Mode:

- Bus Data is collected by the CAD/AVL System.
- Rail Mode data is collected by the modal control rooms.
- Paratransit data is transmitted by on-board MDT to the scheduling system or validated by a call from vehicle to a manager upon rider pick up.

NATIONAL BENCHMARK:

Per APTA Standards Modal OTP Benchmarks are as follows:

Bus – 78 percent

Rail - 90 percent

Para-Transit – 92 percent

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Reliability of transportation services is important to MDOT customers. Many rely on posted arrival and departure times to make needed connections and for critical appointments. This measure will allow the TBUs to focus resources where needed to improve on-time performance.

The public timetable has been referred to as "our contract with our riders." On-Time Performance (OTP) is the measurement of adherence to that contract. Maintaining a high level of OTP is of critical importance when providing ground transportation.

Whether a customer has a one-seat ride or needs to make a complex intermodal connection, the rider has an expectation that services will be provided reliably and as scheduled. MTA and MAA schedule adherence drives not only customer perception of the service provided directly, but the efficient use of taxpayer dollars, management processes, and the efficiency and reliability of State Government.

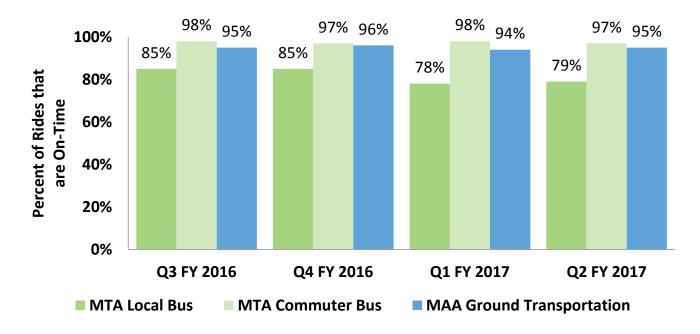
As an agency, MTA continues to meet or exceed American Public Transportation Association (APTA) benchmarks for OTP across Bus (78%), Rail (90%), and Paratransit (92%) modes. The commitment to continual improvement of OTP is evident in efforts to provide a transit network that allows passengers to travel more efficiently throughout the service area utilizing schedules that accurately reflect passenger travel times. This drives down service related complaints and results in a better passenger experience.

The implementation of the BaltimoreLink bus system will result in bus service that is easier for riders to use, while simultaneously being easier to manage and get "back on time" in the event that challenges related to delivering urban mass transit cause service disruptions. The results will be a more user-friendly, reliable system, as well as continued improvement in service delivery and the perception of mass transit services.

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Chart 5.1D.1: On-Time Performance of MTA Local Bus, MTA Commuter Bus, & MAA Ground Transport Q3 FY2016-Q2 FY2017



Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Chart 5.1D.2: On-Time Performance of MTA Light Rail, Metro Subway, & MARC Train Q3 FY2016-Q2 FY2017

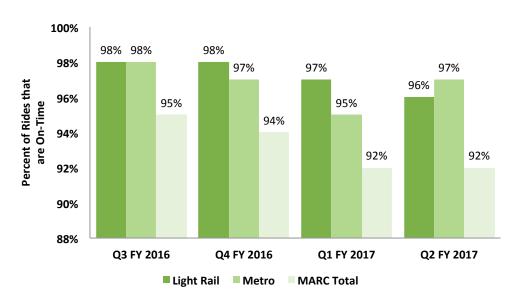
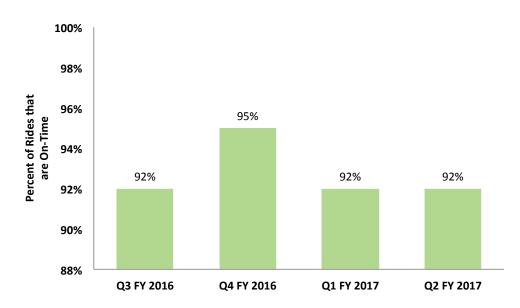


Chart 5.1D.3: On-Time Performance of MTA Paratransit Q3 FY2016-Q2 FY2017



TANGIBLE RESULT DRIVER:

Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Roxane Y. Mukai Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To provide customers with a gauge by which to assess travel time reliability on the State's highway system.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY: Formula based.

NATIONAL BENCHMARK:

A Planning Time Index (PTI) which is < = 1.5.

PERFORMANCE MEASURE 5.1E

Reliability of the Transportation Experience: Planning Time Index for Highway Travel

Customers want reliable travel times when traveling on Maryland's highway system. The planning time index (PTI) is a metric that gauges how reliable travel times are on heavily used freeways and expressways during periods of peak congestion.

For example, if a trip during uncongested, free-flowing traffic conditions takes a traveler 15 minutes; a PTI of 2.0 would indicate that the same trip during a heavily congested period could be expected to take up to 30 minutes. MDOT uses the following PTI ranges to describe the varying degrees of travel time reliability:

> PTI < 1.5 = Reliable 1.5 > PTI < 2.5 = Moderately Unreliable PTI > 2.5 = Extremely Unreliable

In 2015, travel time on 8% (AM Peak) to 14% (PM Peak) of the freeways and expressways were assessed as "extremely unreliable" during congested periods on an average weekday. Almost all of the freeway and expressway segments that are "extremely unreliable" during congested periods are in the Baltimore-Washington region.

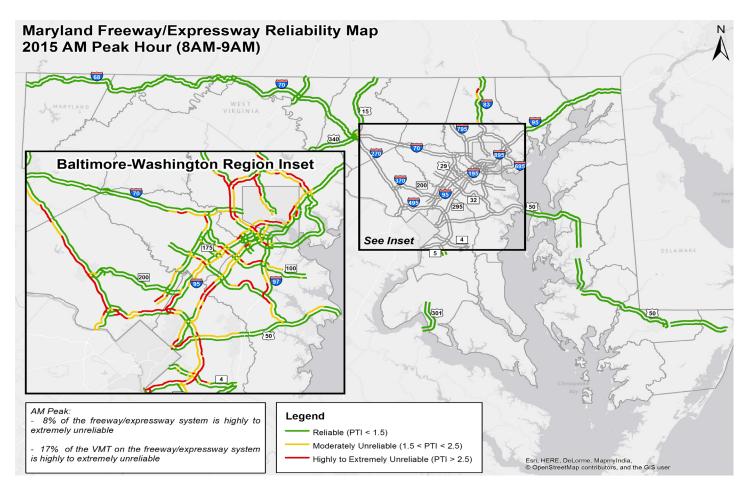
When compared to 2014, the 2015 travel reliability results were mixed. Continued economic recovery led to an increase of 1.6% in VMT above 2014, with a very slight decrease (two miles) in roadway miles that experienced "extremely unreliable" conditions during the AM Peak and an additional 21 miles of freeway/expressway that experienced "extremely unreliable" travel conditions during the PM Peak.

Changes to the PTI that result from completed highway projects are reflected in the PTI analysis over time. As an example, the I-95 Express Toll Lane project in Baltimore opened in December 2014. The 2015 PTI analysis found that the I-95 SB PTI in the AM peak was reduced from 2.60 to 1.44 and the I-95 NB PTI in the PM peak was reduced from 2.79 to 1.18. The I-95 Expresss Toll lane project area is now assessed as a "reliable" freeway segment.

PERFORMANCE MEASURE 5.1E

Planning Time Index for Highway Travel

When compared to 2014, the AM Peak reflects a 1% increase in VMT and a 1% decrease in the number of freeway and expressway miles with a PTI > 2.5.

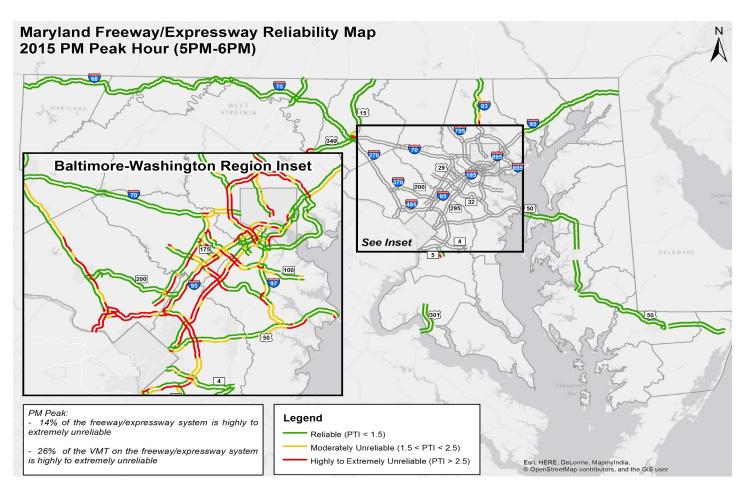


Source: 2016 Maryland State Highway Mobility Report

PERFORMANCE MEASURE 5.1E

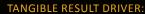
Planning Time Index for Highway Travel

When compared to 2014, the PM Peak reflects a 3% increase in VMT and a 1% increase in the number of freeway and expressway miles with a PTI > 2.5.



Source: 2016 Maryland State Highway Mobility Report

Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Glenn McLaughlin State Highway Administration (SHA)

PURPOSE OF MEASURE:

To understand the impact on efficiency of quickly restoring transportation services after incidents for customers.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY

The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of incidents causing disruptions.

NATIONAL BENCHMARK:

Arizona – 32 minutes

North Carolina – 69 minutes

Connecticut – 45 minutes

Iowa – 56 minutes

Michigan – 54 minutes

Minnesota – 35 minutes

Missouri – 24 minutes

New Jersey – 43 minutes

Virginia – 32 minutes

PERFORMANCE MEASURE 5.2A

Restoring Transportation Services: Average Time to Restore Normal Operations After Disruptions

MDOT's customers expect a safe, well-maintained, efficient and reliable transportation system with minimal disruption to travel. Rapid response to effectively manage and clear incidents that disrupt highway travel is one strategy that is essential in meeting these expectations. Efforts to improve coordination and cooperation among TBUs and emergency responders facilitate the reduction in response times and the overall average incident duration, restoring travel more quickly for customers. The "average incident duration" is a measure of the time it takes a response unit to arrive, plus the elapsed time between the arrival of the first unit and the time stamp in the CHART advanced traffic management system denoting the restoration of normal operating conditions.

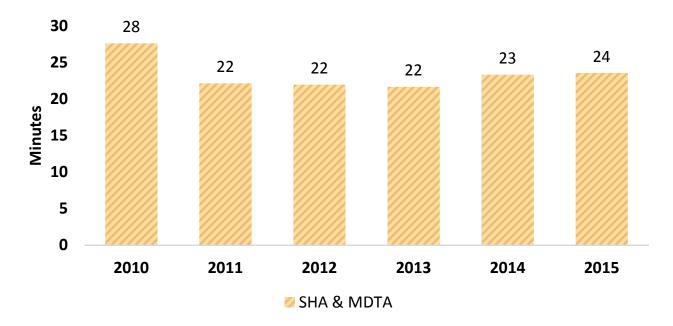
As shown in chart 5.2A.1, the average incident duration between calendar years 2010 and 2015 has been consistently less than 30 minutes. The slight increase in average incident duration in calendar years 2014 (23.32 min.) and 2015 (23.54 min.) is likely due to the addition of overnight and weekend patrol hours. During the night and weekends, incident clearance takes slightly longer, since emergency responding agencies operate at reduced staffing levels, or depend on "on-call" staff. However, performance measures show that night and weekend patrols have a significant positive impact on reducing overall travel delays.

The primary strategies for improving transportation incident management focus on assuring that emergency responders have well established coordination procedures, effective communications, thorough training and the resources available to address any type of incident. MDOT is leading three initiatives to improve coordination with the MSP including; formalizing working relationships with the Heavy Tow Industry through MSP managed agreements which may include performance incentives for prompt vehicle recovery; organizational modifications to better support inter-agency coordination between MSP and MDOT; and enhancing data collection on reported crashes, including the identification of preventable secondary incidents. MDOT is also supporting the deployment of the Maryland First radio system statewide to improve inter-agency emergency communication. And, MDOT is leading efforts to provide standardized incident management training, to raise the level of emergency preparedness and safety of emergency responders who manage incidents on the transportation system.

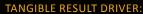
PERFORMANCE MEASURE 5.2A

Restoring Transportation Services: Average Time to Restore Normal **Operations After Disruptions**

Chart 5.2A.1: Average Highway Incident Duration (minutes) 2010-2015



Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Glenn McLaughlin State Highway Administration (SHA)

PURPOSE OF MEASURE:

To understand the impact on efficiency of quickly restoring transportation services after weather events.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of weather events.

NATIONAL BENCHMARK:

Minnesota – 3 hours

Washington, DC – 18 hours

Missouri – 3.8 hours

PERFORMANCE MEASURE 5.2B

Restoring Transportation Services: Average Time to Restore Normal Operations After a Weather Event

MDOT's customers expect a safe, well-maintained, efficient and reliable transportation system with minimal disruption to travel. Disruptions in travel due to inclement weather (snow, ice, etc.) require specialized operations experience and rapid response to restore normal operating conditions. To understand performance during winter storms, MDOT collects data on the "average time to restore normal operations after weather events." This measure is calculated by identifying the lapse in time from the ending of frozen precipitation in a maintenance shop's area of responsibility and achieving bare (wet or dry) pavement conditions.

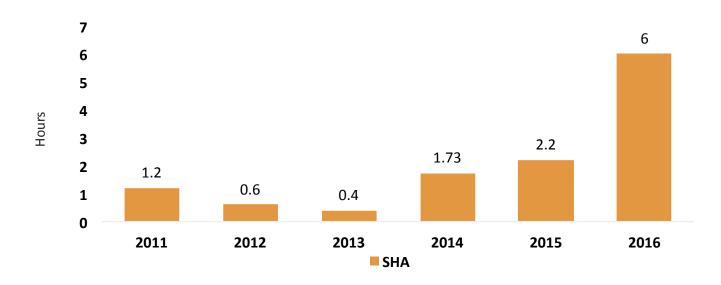
As shown in chart 5.2B.1, the average time to restore normal operations after weather events for the years 2011 through 2015 was consistently less than the benchmark value (3.8 hours –Missouri). The Average Time to Restore Normal Operations after a Weather Event increased to 6 hours in Fiscal Year 2016, mostly due to the impacts of Winter Storm Jonas which involved more than 24 inches of snow accumulation, over the period of January 22-24, 2016.

Recognizing that a large winter event such as Jonas presented unique challenges, MDOT initiated a major after-action initiative, which identified 30 tasks for improving Maryland's Winter Storm preparedness. Some of the major tasks included compiling and maintaining winter storm emergency contact lists; updating emergency procurement procedures for obtaining necessary resources (e.g. food, lodging and supplies) during major weather events; developing the capability of displaying automated emergency weather warning on programmable highway message signs; identifying resources for transporting personnel during heavy snow conditions; and documenting and distributing lists of "pre-identified" snow disposal areas. All tasks were accomplished between February and October 2016. Another major strategy was to incorporate contracts for private, heavy-tow services under the emergency snow removal procurement regulations. These services are used to recover and relocate trucks stranded in the snow from traveled lanes, to maintain a clear roadway and facilitate overall snow removal efforts.

PERFORMANCE MEASURE 5.2B

Restoring Transportation Services: Average Time to Restore Normal Operations After a Weather Event

Chart 5.2B.1: Time to Regain Bare Pavement After Snow (hours) 2011-2016



Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Negash Assefa Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To measure percentage of services through alternate methods other than in-person visit as an indicator of easy and reliable access to MDOT services and products.

FREQUENCY:

Semi-Annually (in April and October)

DATA COLLECTION METHODOLOGY:

Formula accounts for total customer transportation services and products compared to those acquired by alternate methods.

NATIONAL BENCHMARK: FY2018 - 68%

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

MDOT customers want easy and reliable access to acquire transportation services and products. According to a 2015 Pew Research Center study, 42 percent of Americans use the internet to get government services and/or information and 22 percent use the internet to make or receive payments. In general, it is anticipated that 68 percent of MDOT customers will use alternate methods to access services and goods.

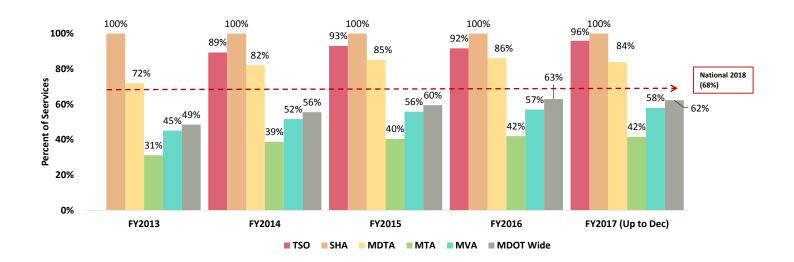
Presently, SHA, MDTA, MTA, TSO and MVA provide transportation related services and products to customers through alternative service delivery (ASD) methods such as web, kiosk, call center/interactive voice response (IVR) and mail-in. MAA and MPA have mid-term projects in the planning stages to offer pre-pay parking options to airport and cruise terminal customers.

For the first two quarters of FY2017, SHA accomplished 100 percent; MDTA achieved 84 percent; MTA realized 42 percent, TSO achieved 96 percent and MVA achieved 58 percent of total eligible services and products via alternate methods. Combined, these TBUs achieved an ASD rate of 62 percent which is nearing the FY 2018 national standard of 68 percent.

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

Chart 5.3.1: Percent of Alternative Service Delivery by TBU FY2013-FY2017



Provide an Efficient, Well-Connected Transportation Experience



Phil Sullivan Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Ralign T. Wells Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To assess the functionality and value of real-time signage and information systems offered.

FREQUENCY:

Quarterly for functionality. Annually for customer satisfaction (in July).

DATA COLLECTION METHODOLOGY:

Sampling of real-time signage or IVR systems to determine a percentage of functionality.

Survey users to assess their opinion of usefulness and satisfaction with Real-Time Information Systems.

NATIONAL BENCHMARK:

85%-90% Functionality¹

¹ According to Clever Devices, industry experts on real-time information

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Reliance and Customer Satisfaction with the Accuracy of Real-Time Signage Provided

MDOT customers of MTA, MVA, MAA, SHA, and MDTA benefit from "real-time" information systems installed throughout the transportation network offering users the most accurate "real-time" information available to help them prepare for, and manage their time while using, statewide transportation services to pursue life's opportunities.

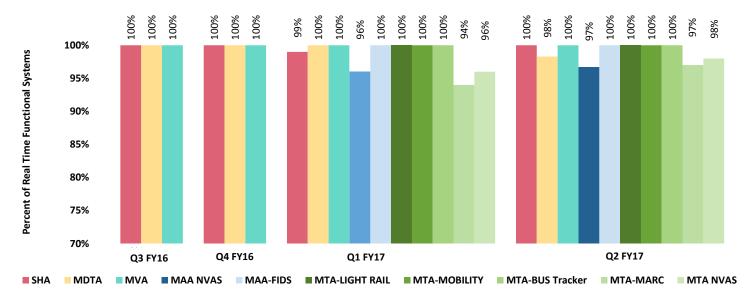
Combined, all MDOT TBUs exceed industry expert's expectations of 90% functionality, averaging 99% functionality for Q2 of Fiscal Year 2017.

Currently, all TBUs have processes in place to ensure that any system failures are immediately addressed to ensure near 100% functionality at any given time. Systems will continually be monitored to ensure continued stellar "up-time" performance.

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Reliance and Customer Satisfaction with the Accuracy of Real-Time Signage Provided

Chart 5.4A.1: Percentage of Functional Real-Time Information Systems Provided for Q3 FY2016-Q2FY2017



Communicate Effectively With Our Customers

TANGIBLE RESULT #6

Communicate Effectively With Our Customers



Every MDOT employee has to communicate with customers, some on a daily basis. It is critical to communicate clearly, concisely, timely and accurately with customers.

RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Katie Bennett Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To examine and analyze the social media activities of each MDOT TBU to gauge if MDOT is communicating effectively with customers/followers.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT gathers social media analytics for this measure from **MDOT Twitter and Facebook** accounts.

NATIONAL BENCHMARK:

N/A

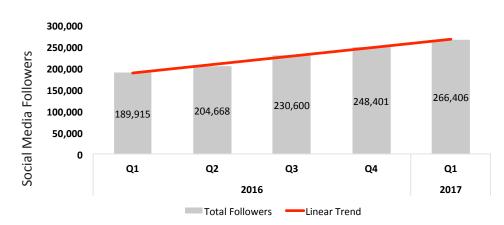
PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

Social media has become a standard method for businesses to communicate with their customers. MDOT uses social media channels to disburse clear and accurate information to their customers and the media in a timely manner.

"Social Reach" measures the number of customers who have seen MDOT messages on Facebook and Twitter. MDOT strives to reach customers through the channels they use. Efforts are focused on developing social media strategic skills and programs MDOT-wide to enhance social reach. To date, MDOT proudly has nearly 270,000 fans on social media and continues to grow by at least 3% each month.

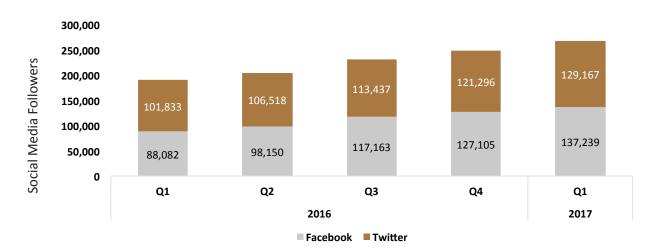
Chart 6.1A.1: Total MDOT Social Media Followers 2016-2017



PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

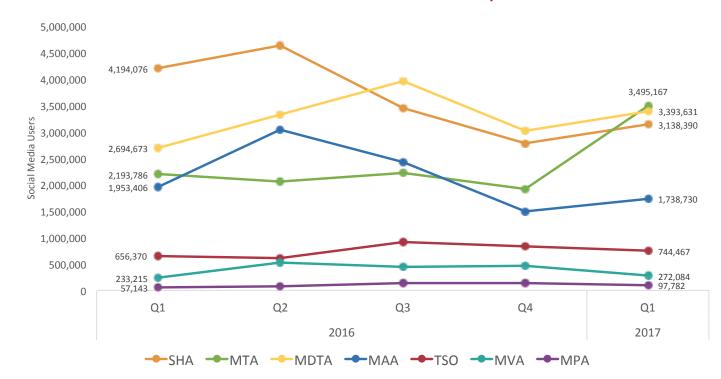
Chart 6.1A.2: MDOT Social Media Followers by Platform 2016-2017



PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

Chart 6.1A.3: Total MDOT Users Reached on Social Media by TBU 2016-2017



Communicate Effectively With Our Customers

Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Richard Scher

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To examine and analyze the social media activities of each MDOT TBU to gauge if MDOT is communicating effectively with our customers/followers.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT gathers social media analytics for this measure from all MDOT Twitter and Facebook accounts.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 6.1B

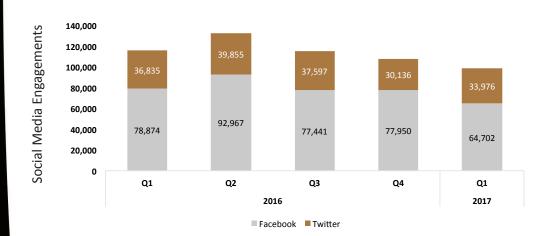
Communicate Effectively Utilizing Social Media: Social Engagement

While "social reach" measures the total number of people who have seen a message, "social engagement" recognizes how followers engaged with that message. Engagements initiate opportunities to communicate interactively with customers.

To determine the effectiveness of its social media communication, MDOT measures social engagement across all MDOT social media accounts, looking for trends in likes, comments and shares to better provide content its followers will enjoy and find informative. Through education and training, MDOT staff are determined to heighten the social experience of their customers.

MDOT continues to learn the interests of its customers through social media channels to provide the content customers expect.

Chart 6.1B.1: MDOT Social Media Engagements by Platform 2016-2017



TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Sharon Rutzebeck Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track how clearly and effectively MDOT communicates with customers at public meetings.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data will be collected via survey at all public meetings hosted by MDOT business units. The data will be owned and housed by the business unit in charge of the public meetings and sent to MVA on a quarterly basis.

NATIONAL BENCHMARK: 84% (ASCI index)

PERFORMANCE MEASURE 6.2

Satisfaction with Communication at **Public Meetings**

MDOT strongly encourages community participation in its public transportation meetings and workshops. Effective communication with a diverse community is critical for the success of MDOT's transportation projects. MDOT wants to make certain that its transportation planners, engineers and construction professionals use language, graphics, maps and other project related materials that are customer friendly and easy to understand.

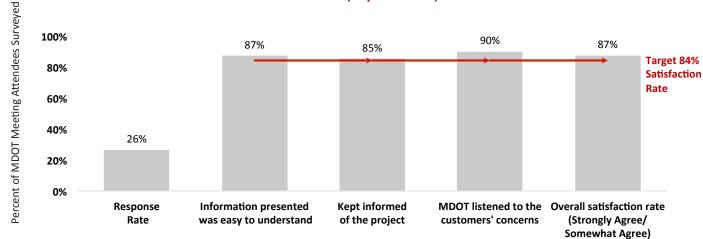
A standardized survey method was used during public meetings and workshops hosted by MDTA, MTA and SHA to measure and track customer perception of how clearly and effectively MDOT personnel communicated with the community. From July 2017 – February 2017, 87 percent of customers (127 customers) surveyed during eight separate MDOT events indicated they were satisfied with the project information received during these meetings.

MDOT is very pleased to have exceeded its national identified customer satisfaction benchmark of 84%, but wants to continue to implement communication initiatives that will lead to enhanced project information effectiveness and increased customer knowledge. Several action items consist of reviewing and revising project related materials to improve customer understanding, enhancing presentations to promote a customer voice, and ensuring that MDOT representatives always interact positively and professionally while being helpful and responsive to the public.

PERFORMANCE MEASURE 6.2

Satisfaction with Communication at Public Meetings

Chart 6.2.1: Overall Customer Satisfaction with Communication at Public Meetings - FY 2017 (July - Feb 2017)



TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Jonathan Dean Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track number of stories generated to ensure maximum customer reach.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data can be derived through software systems.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.3A

Communicate Effective Through News Releases: Number of News Stories Generated from Major Releases

TBU communications and media relations professionals work to highlight the good work performed by employees across MDOT. These public information leaders use their experience and knowledge to represent MDOT and serve as spokespersons before the news media and general public.

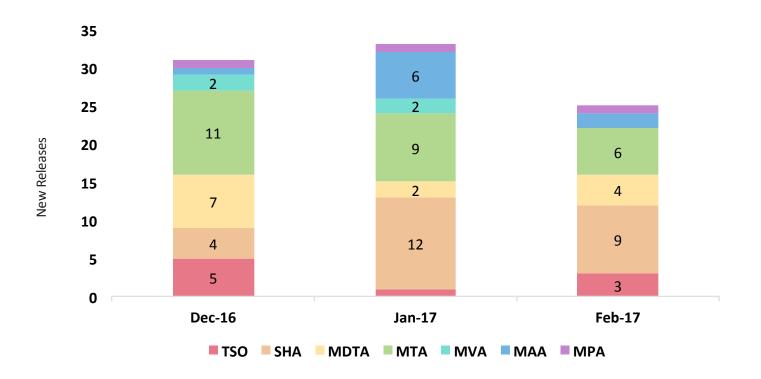
Performance measure 6.3A encourages each MDOT TBU to monitor and analyze the news that it creates and disseminates. Each month, TBUs use a variety of methods to showcase positive aspects of MDOT services and products. Press releases remain an important tool to distribute news to Maryland residents, businesses, and visitors. This performance measure examines the number of press releases issued each month and the corresponding number of news stories that resulted from the press releases.

The press releases created by MDOT TBUs continue to result in broad reach across local, national, international and transportation trade media.

PERFORMANCE MEASURE 6.3A

Communicate Effective Through News Releases: Number of News Stories Generated from Major Releases

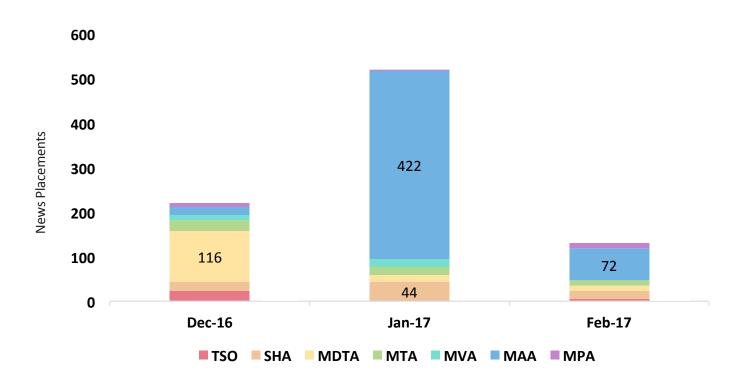
Chart 6.3A.1: Number of News Releases by TBU Dec 2016 - Feb 2017



PERFORMANCE MEASURE 6.3A

Communicate Effective Through News Releases: Number of News Stories Generated from Major Releases

Chart 6.3A.2: Number of News Placements by TBU Dec 2016 - Feb 2017



TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Valerie Burnette Edgar State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the effectiveness of the news releases issued by MDOT. Demonstrates cost effectiveness of releasing public information to media outlets vs. buying advertising space/time.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data can be derived through software systems and some of the data is calculated per news story by individuals using advertising rates of media outlets.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

Print and broadcast media are the industry standard for business to customer communication. To reach its customers, MDOT has the option to buy advertising space or time in the market or to issue news releases that are then picked up and editorialized by large publications. The later offers a significant cost-savings to MDOT and the tax-paying public while allowing for MDOT messages to reach more customers quickly and efficiently.

MDOT issues news releases to inform customers of important information they need regarding transportation services and projects. This measure shows the value of print and broadcast stories generated by news releases to determine the cost effectiveness of news releases (reaching customers with news and information without purchasing advertising for public notice).

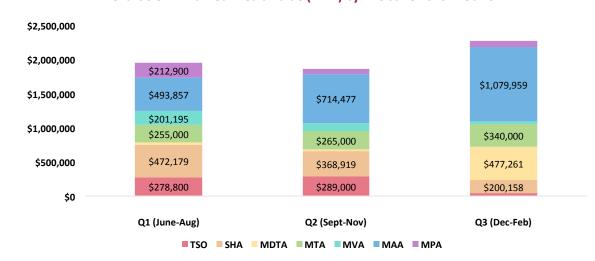
PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

Chart 6.3B.1: Earned Media Value (EMV) MDOT-Wide June 2016 - Feb 2017



Chart 6.3B.2: Earned Media Value (EMV) by TBU June 2016 - Feb 2017





Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Valerie Burnette Edgar State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the tone of media coverage resulting from news releases.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

MDOT's team will use software that tracks releases and news generated to evaluate tone of news stories.

NATIONAL BENCHMARK: N/A

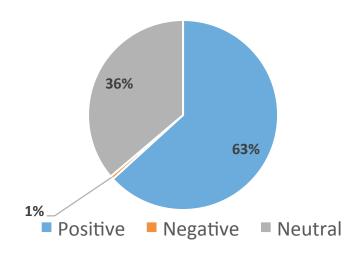
PERFORMANCE MEASURE 6.3C

Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases

MDOT has a responsibility to inform customers about important information they need relating to services, transportation options and improvements in their communities. One way MDOT shares information is through issuing news releases to the media.

This measure helps MDOT evaluate the tone of print and broadcast news stories that are directly related to MDOT news releases to determine if there is balanced coverage for customers. It also helps MDOT determine if more, less or different information is needed to ensure customers are receiving factual information via news outlets.

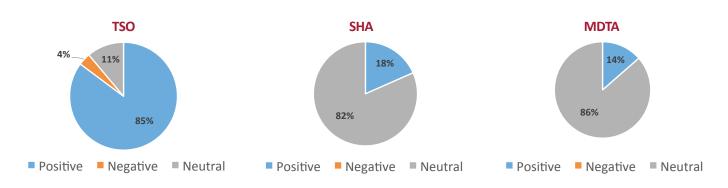
6.3C.1: Overall "News Tone" MDOT-Wide December 2016 - February 2017

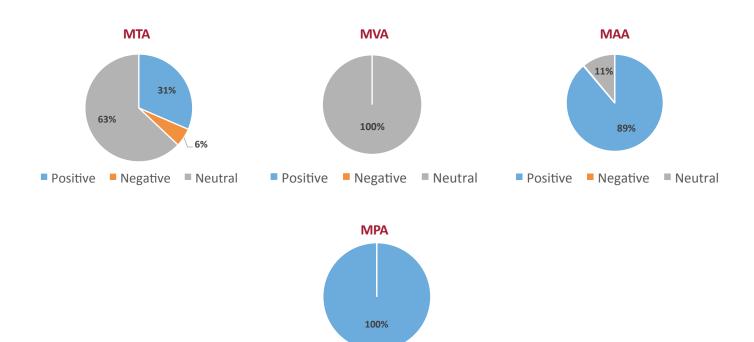


PERFORMANCE MEASURE 6.3C

Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases

6.3C.1: Overall "News Tone" by TBU December 2016 - February 2017





■ Positive ■ Negative ■ Neutral

TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Lisa Dickerson The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To assess effective communication via translators at public meetings.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

Translated customer survey deployed at the conclusion of each public meeting.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Customers, regardless of their proficiency in English, should be able to actively participate in public meetings and review public documents. MDOT is working to provide translation services at all public meetings to ensure that public meetings meet the needs of all of customers, including those with limited English proficiency.

Public meetings are a valuable communication tool for MDOT and its customers. Whether it is a new project that will impact their community or new products and services that impact their transportation experience, public meetings are a place for MDOT customers to receive helpful information.

MDOT is maximizing the use of electronic and social media to achieve this performance measure. Significant progress was made to web sites throughout all of MDOT. MDOT web sites currently allows for translation of over 160 languages and dialects via "Google Translation." Data collection at all TBUs has been standardized and the data includes information from all TBUs except MTA, which will be included in the next report.

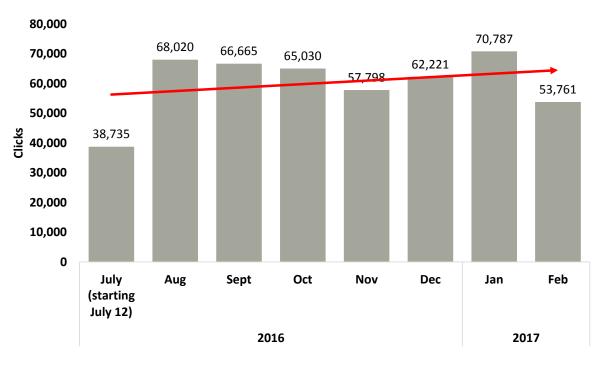
During December, January, and February, MDOT tracked approximately 187,000 Google Translations in 148 different languages and dialects. The top five translations were Spanish, English, French, Chinese, and Vietnamese. Those translating to English are most common on the MAA and MPA web sites, suggesting that the user is switching to English on a browser with a different default language. The following tables highlight the different customer bases using TBU web sites.

Regulations require only the posting of vital documents—Title VI Plan, Process, and Complaint Procedures. The overall strategy is to institutionalize use of translated documents posted electronically and in print for MDOT Public Hearings/Meetings.

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at **Public Meetings**

Chart 6.4.1: Google Translate Clicks on All MDOT Web Sites July 2016-Feb 2017



PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at **Public Meetings**

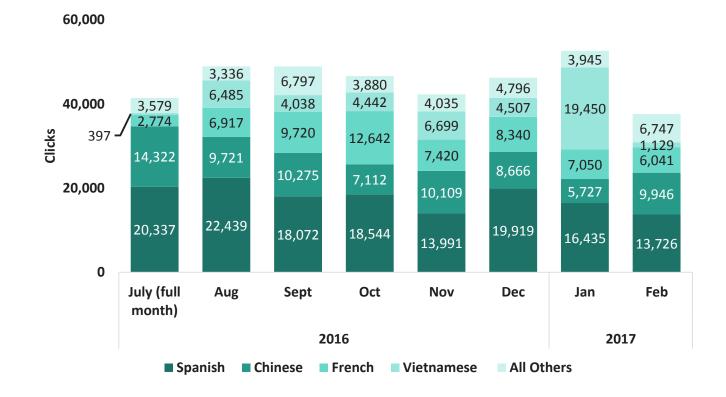
Chart 6.4.2: Google Translation Clicks by TBU Web Site July 2016-Feb 2017



PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at **Public Meetings**

Chart 6.4.3: Google Translation Clicks on MVA Web Site by Language July 2016 - Feb 2017



TANGIBLE RESULT DRIVER:

Diane Langhorne The Secretary's Office

PERFORMANCE MEASURE DRIVER:

Jonathan Dean The Maryland Aviation Administrationn (MAA)

PURPOSE OF MEASURE:

To track news customers can use 24/7.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Supported by all MDOT Communications Directors, measurement will include tracking estimates of media outlets that cover pitched stories and the number of pitches generated each month from submitting news releases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.5

News Customers Can Use – Proactive Media Stories

TBU communications and public affairs leaders monitor MDOT activities and identify opportunities to publicize and promote unique and positive stories for customers. MDOT works to develop and maintain relationships with reporters and editors across the news media.

This new performance measure highlights MDOT communicators' work to create and disseminate distinctive stories to the news media and the general public. Customer service initiatives are a major emphasis of this media outreach.

For this new measure, MDOT has established that TBUs will identify several significant, leading media outlets. MDOT communicators will coordinate with these news outlets to produce stories related to customer service or new MDOT services. For each quarter, MDOT will highlight a number of positive news stories that were the result of the expanded outreach.







kind words, good advice

Be Fair and Reasonable to Our Partners

TANGIBLE RESULT #7

Be Fair and Reasonable to Our Partners



MDOT will provide an easy, reliable procurement experience throughout the system.

RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Angela Martin Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track MBE participation achieved on contracts within MDOT.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT TBUs report the data on a quarterly basis to Governor's Office of Minority Affairs (GOMA) and MDOT. The information will be provided by MDOT from that report.

NATIONAL BENCHMARK:

N/A

The state goal/benchmark is 29 percent.

PERFORMANCE MEASURE 7.1

Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU

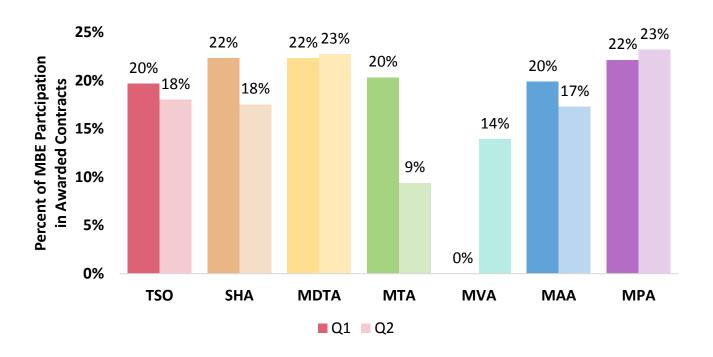
The MBE program is a statewide program to facilitate minority business participation on contracts. Each MDOT TBU tracks MBE participation data for internal program monitoring. Participation is reported on a quarterly vear-to-date basis.

- MDOT MBE participation for the second quarter FY 2017 was 17.47 percent (average of all TBUs) reflecting a slight decrease from the first quarter of FY 2017, which was 21.1 percent. Participation at the TBUs ranged from 9.40 percent to 23.2 percent. MDOT MBE participation continues to be lower due to the impact of the deletion of non-profit contract dollars.
- MBE participation is important as MDOT is subject to the statewide MBE goal of 29% as are all state agencies. Participation has been up and down during the last fiscal year, with one TBU reaching a percentage as high as 29% in one quarter, but overall the participation has not been at that level.
- Per the strategic plan, input is being obtained from MDOT Procurement and Fair Practices staff regarding approaches to positively impact the goal. Unbundling of contracts, an increase in the number of smaller contracts and increased/enhanced outreach efforts are items that should have positive impact.
- MDOT MBE Participation for FY 2016 was 18.72 percent (average of all TBUs).



Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU

Chart 7.1.1: MBE Participation in Awarded Contracts FY2017 Q1-Q2



TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Angela Martin Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track MBE prime contractor participation achieved on contracts within MDOT to ensure MDOT provides opportunities to all of business partners.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data will be collected from MDOT and TBUs.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 7.2

Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor

Participation of MBE firms as a prime contractor is important to facilitate their growth and enable them to compete in the general marketplace after graduation. MBE firms "graduate" from the program when reaching designated thresholders, i.e., company gross receipts and personal net worth of owners.

The information reported in this measure is the number of MBE prime contractors awarded contracts at or above \$500,000. It does not include small purchases. The number of contracts awarded remains fairly low (0 – 3 awards for most MDOT TBUs for the second quarter of FY 2017), however, two TBUs did award 7 and 19 MBE prime contract awards during the second quarter.

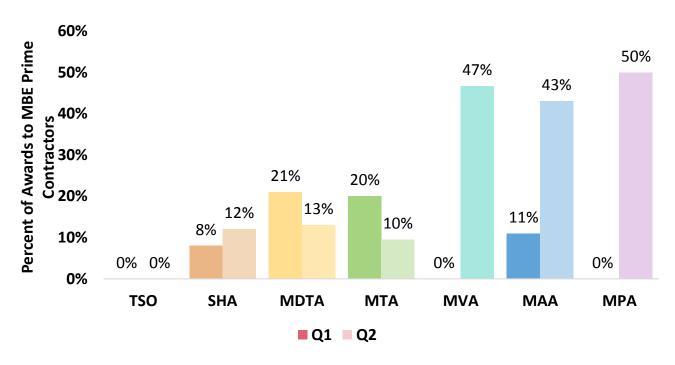
The contracts cover a variety of areas including construction, architectural, engineering, maintenance and services.

Although the overall percentage of MBE prime awards within MDOT has been around 10%, this quarter the percentage has increased to 24.9% due to the higher awards of the two TBUs cited above.

Per the strategic plan, input from the Procurement and Fair Practices staff is being obtained regarding approaches to increase the number of MBE primes. Unbundling of contracts, increasing the number of smaller contracts in areas with high levels of MBE firms and enhanced outreach and technical assistance to these firms should have some impact.

Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor

Chart 7.2.1: Percent of MBE Prime Contracts (at least \$500,000) Awarded FY2017 Q1-Q2



TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Wonza Spann-Nicholas Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

Track compliance with State mandate for awarding 10% of MDOT's total eligible procurement expenditures to certified Small Business Reserve contracts.

FREQUENCY:

Quarterly, compiled annually

DATA COLLECTION METHODOLOGY:

SBR goal is calculated quarterly from eligible contracts and expenditure data exported from FMIS, iFMIS and US Bank for Corporate Credit Card data.

NATIONAL BENCHMARK:

GOMA maintains the State's official record of SBR designation and spending across 23 participating agencies, including MDOT's TBUs. The State's mandate is 10% or better.

PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Maryland's economy is powered by the jobs and innovative resources generated by small businesses. The SBR Program is a race-and gender-neutral program that provides small businesses with the opportunity to participate as prime contractors on State contracts and procurements by competing with other small businesses instead of larger, more established firms.

To ensure compliance with State regulations, each Transportation Business Unit (TBU) is required to participate in the SBR Program by spending at least 10% of their annual fiscal year eligible procurement expenditures with qualified small businesses.

For the first time since the SBR Program was established in 2004, MDOT achieved an 11.2% participation rate in FY2015. However, the Governor's Office of Minority Affairs has not released the FY2016 Annual Achievement rates as of March 24, 2017.

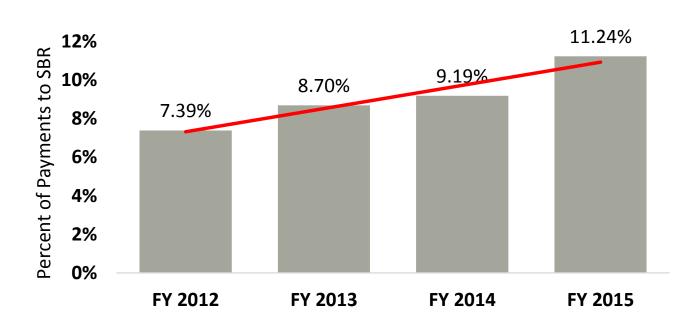
To increase the SBR Program participation rates, MDOT provided documented policy guidelines to all TBUs. These guidelines focus on increasing the SBR participation rate by requiring an Annual Strategic Plan from each TBU.

Some strategies include:

- Require Procurement Review Group's approval of SBR goals.
- Create a SBR Liaison and Reporting Expert
- Train/work closely Purchasing Card holders to emphasize SBR firms
- Increase small business outreach and vendor education

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

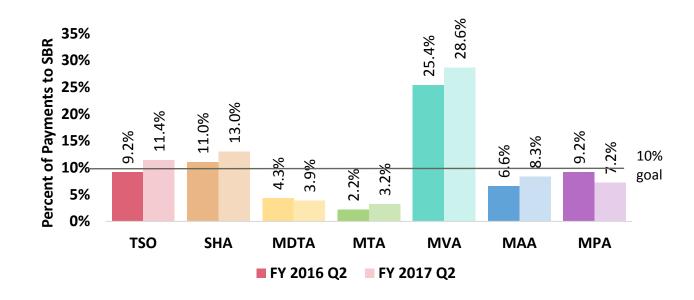
Chart 7.3.1: MDOT SBR Achievement Rates, FY2012-FY2015



PERFORMANCE MEASURE 7.3

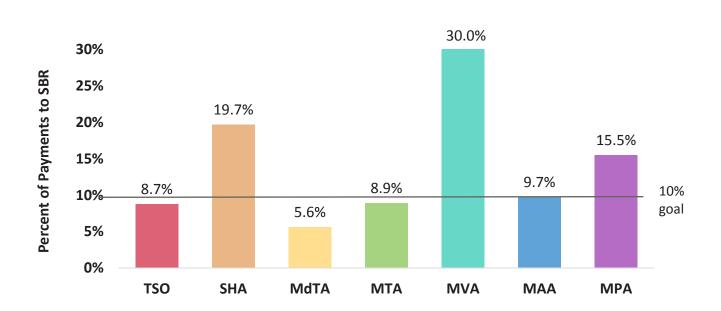
Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Chart 7.3.2: SBR Percent of Payments by TBU, Q1 FY2016-FY2017



Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Chart 7.3.3: FY 2015 Annual SBR Rate-11.24%



TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Natalie Grasso

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the percent of VSBE contract values to ensure that MDOT continues a contractual relationship with VSBs in Maryland.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Using the Financial Management system at MDOT.

NATIONAL BENCHMARK:

N/A

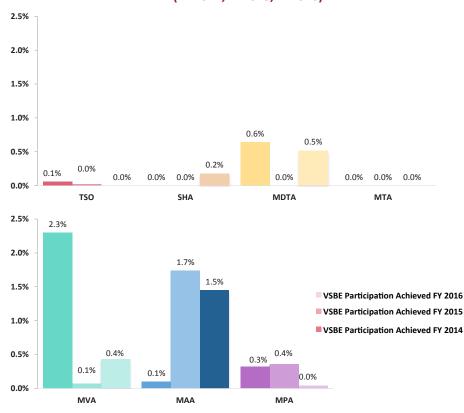
The State's mandate is 1 percent or better of its total dollar value of procurement contracts.

PERFORMANCE MEASURE 7.4

Percent of Veteran Owned Small Business Enterprise (VSBE) Participation

MDOT considers small business, especially veteran owned small businesses, to be an important sector of the business community. Procurement opportunities for this business segment are directly linked to the socioeconomic well-being of the State of Maryland. MDOT is committed to attaining or exceeding the State mandated goal for veteran businesses.

Chart 7.4.1: VSBE Percentage Across MDOT (FY 2014, FY2015, FY2016)



TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Luther Dolcar **Maryland Transportation Authority** (MDTA)

PURPOSE OF MEASURE:

To determine the level of satisfaction of business partners that attend outreach events, seminars and satisfaction with processes MDOT-wide.

FREQUENCY:

Quarterly for outreach, etc.; and Annually for MDOT-wide.

DATA COLLECTION METHODOLOGY

The TBU Data Drivers report provides the data to the MDTA Performance Measure Driver where it is compiled on an Excel spreadsheet and analyzed. The results are provided to MDOT management. It is recommended that an Outlook email address be established for easier quarterly reporting.

NATIONAL BENCHMARK: TBD

PERFORMANCE MEASURE 7.5

Level of Satisfaction of Our Business Partners

Tracking business partner satisfaction will allow MDOT to determine how satisfied partners are with current business processes. This performance measure is crucial to gauging MDOT's effectiveness in being fair and reasonable to its business partners. Partners include contractors, consultants, vendors, other state agencies, Federal, State, and local governments, trade associations, commissions, etc. This data can be used to improve those processes that may be ambiguous or cumbersome, and make them more user-friendly. It is important that people who avail themselves of this opportunity know that their comments are taken seriously, and that MDOT is committed to meeting or exceeding business partner expectations.

Currently, the objective is to capture MDOT's business partner satisfaction at various outreach events. Surveys are distributed at each event to gauge our business partners level of satisfaction. Previously the focus centered on capturing and reporting the number of surveys conducted, but this measure is evolving to report more relevant data. MDOT is in the process of better defining who/what constitutes a business partner and plan to revise surveys and team composition accordingly.

Due to the lack of reportable data for all TBUs, the data represented is now being reported on an MDOT-wide basis. This will change to TBU specific data as we obtain more substantial statistics in future quarters.

Some highlights of the previous three fiscal years are as follows:

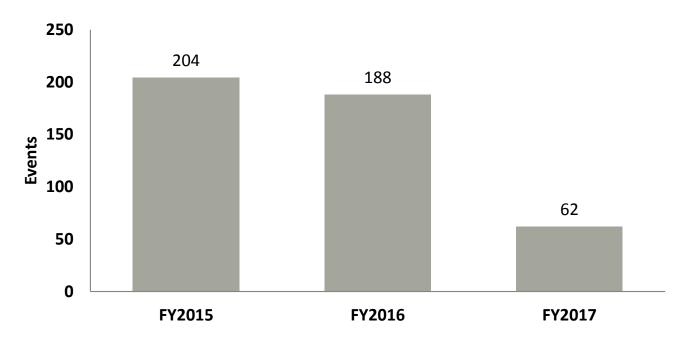
- "In FY2015 MDOT achieved 92% satisfaction with MVA's Smooth Operator Initiative".
- In FY2016 MDOT achieved 100% satisfaction with the MVA's Impaired Drivers Vendor Conference.
- In FY2017 MDOT achieved 81% satisfaction with the Business Opportunities & Entrepreneurial Training Summit.
- In FY2017 MDOT achieved 96% satisfaction with MAA's Office of Fair Practices Outreach Event.

Starting in FY 2017, MDOT is standardizing the survey questions utilized by all TBUs. The current percentages reflected in these charts establish a baseline for measuring future results.

PERFORMANCE MEASURE 7.5

Level of Satisfaction of Our Business Partners

Chart 7.5.1: MDOT-wide Outreach Events to Business Partners FY2015-FY2017 (YTD)



Level of Satisfaction of Our Business Partners

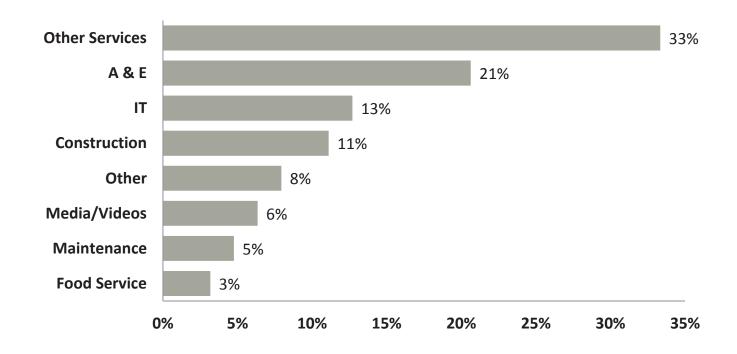
Chart 7.5.2: MDOT Business Partner Satisfaction with Outreach 2015-2017 (YTD)



PERFORMANCE MEASURE 7.5

Level of Satisfaction of Our Business Partners

Chart 7.5.3: Respondents to MDOT Business Partner Satisfaction Surveys, FY2015-FY2017 (YTD)





Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

David Lynch

Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess the number and percent of invoices properly paid to MDOT's partners in compliance with State requirements so MDOT can be responsive to business partners needs.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT Finance reports data monthly by TBUs.

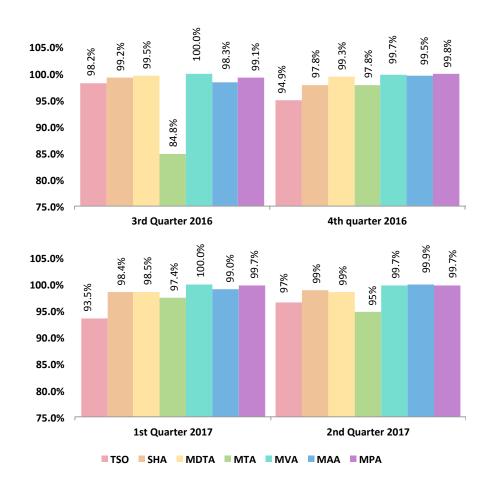
NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

MDOT will treat contractors fairly by promptly paying invoices. Contractors should be able to trust MDOT TBUs consistency of payment with a goal of paying invoices within 30 calendar days 99% of the time. For FY 16 MDOT achieved an on time payment rate of 98.62 %. As of 4th guarter FY 16 data from MVA now only consists of vendor invoices.

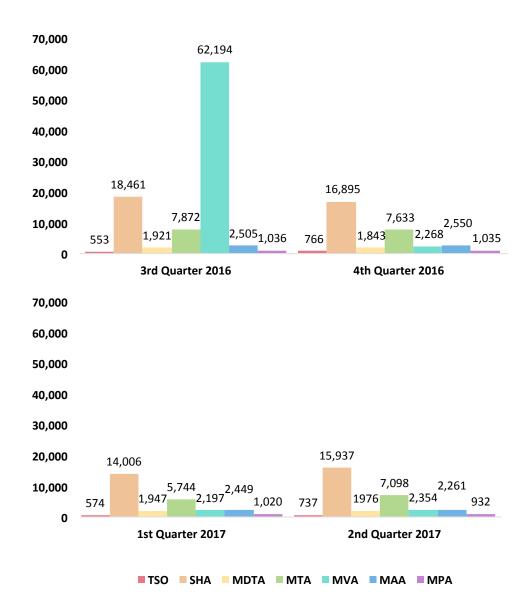
Chart 7.6.1: Percent of Invoices Properly Paid Within 30 Days of Invoices First **Quarters of Fiscal Year 2017**



PERFORMANCE MEASURE 7.6

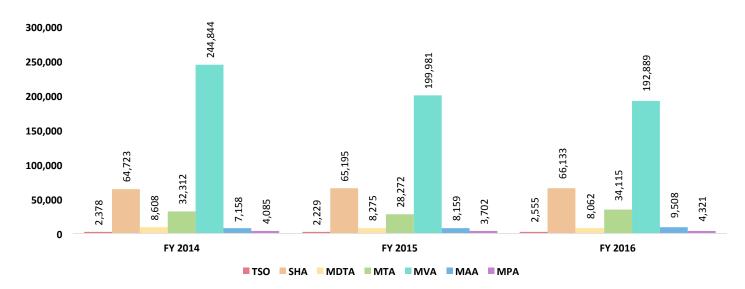
Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

Chart 7.6.2: Percent of Invoices Properly Paid - Total Number of Invoices First, Second, and Third Quarters of Fiscal Year 2016 and First Quarter Fiscal Year 2017



Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

Chart 7.6.3: Total Number of Invoices FY 2014, FY 2015 and FY 2016



TANGIBLE RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Mike Zimmerman The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To determine what percentage of protests are legitimate and how MDOT can reduce the number of non-legitimate protests to create better solicitations for business partners.

FREQUENCY: Quarterly

DATA COLLECTION METHODOLOGY:

MDOT TBU procurement departments report protest data to TSO Procurement on a monthly basis. Data is aggregated for reporting purposes.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 7.7

Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals

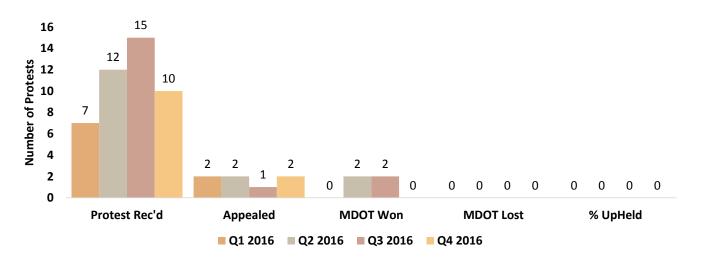
Minimizing protests and understanding how to avoid non-legitimate protests will enable MDOT to develop better solicitations and foster better relationships with business partners. Tracking contract protests will allow MDOT to determine how many protests are being filed without warrant and how many are truly legitimate. This data can be used to create clearer, more concise solicitations for partners. The protest process is important because it allows a company doing business with the State to have confidence in the State's solicitation process by understanding that an aggrieved entity has the ability to be heard.

The TSO Office of Procurement (OOP) is collecting data from all the TBUs. TSO's OOP is documenting the number of protests as well as the reason for the protest.

The TSO OOP will collect data regarding protests so that root cause and corrective/preventive action can be implemented. Currently there is not enough detail to determine what the root cause is.

Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals

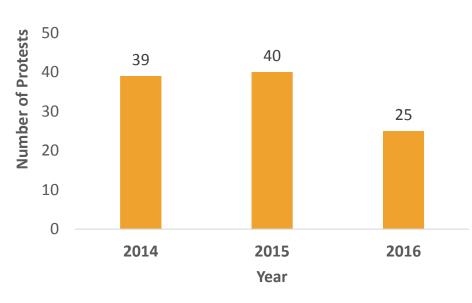
Chart 7.7.1: Running Twelve Month Procurement Protests by Quarter, 2016



PERFORMANCE MEASURE 7.7

Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals

Chart 7.7.2: Protests by Year, 2014-2016



TANGIBLE RESULT #8

Be a Good Neighbor



As the owner of statewide transportation facilities, MDOT must work with our neighbors to find solutions that work for our customers and are sensitive to our neighbors.

RESULT DRIVER:

Simon Taylor Maryland Aviation Administration (MAA)

TANGIBLE RESULT DRIVER:

Simon Taylor Maryland Aviation Administration

PERFORMANCE MEASURE DRIVER:

Anthony Crawford State Highway Administration (SHA)

Timothy Cooke Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To ensure that MDOT maintains attractive and clean facilities with amenities benefiting their neighbors.

FREQUENCY:

Annually (April)

DATA COLLECTION METHODOLOGY:

This will be assessed through an internal assessment and satisfaction survey developed by staff with neighbor input including cleanliness, appearance, operations, access, and safety at all facilities.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.1

Percent of MDOT Facilities that Meet or **Exceed Our Neighbors' Expectations**

Attractive, efficient, and safe operations of MDOT facilities directly affect the surrounding neighbors and communities. MDOT values the relationships we have with neighbors and is committed to ensure the Department meets or exceed their expectations through an internal selfassessment and neighbor satisfaction survey. MDOT will be one of the first to engage our neighbors through staff outreach to better understand what impact facilities have on communities and how the Department can be a better neighbor.

The internal assessments of 58 primary MDOT operating facilities were completed between October and December of 2016. The facilities' overall appearance and cleanliness were rated on a scale of 0-Very Poor to 5-Very Good. MDOT's overall facilities internal assessment ranged from 3.9 to 4.7, resulting in an average of 4.3 (Good-Very Good). Areas in need of improvement include grounds maintenance, material stockpiles, and equipment storage. The neighbor satisfaction surveys are ongoing with a completion date in May of 2017. The surveys are being conducted using mailings, social media, and in-person visits.

The assessment and survey data will measure neighbor expectations, identify areas of improvement, and foster a relationship that will ensure MDOT meets or exceeds neighbors' expectations. The results will be presented in July.

In addition to the improvement plans, the TBUs are implementing strategies to establish relationships and engage surrounding communities to ensure neighbors concerns are addressed.

Examples include:

- Increase community outreach and engagement by:
 - o hosting open house events
 - o attending community association meetings
- •developing a program to track and address neighbor concerns

Percent of MDOT Facilities that Meet or Exceed Our Neighbors' Expectations

Table 8.1.1: MDOT Facility Self-Assessment 2016

ТВИ	Number of Facilities Assessed	Average Rating (Out of 5)	% Based on Points
TSO	1	4.7	94%
SHA	26	4.3	86%
MDTA	7	4.4	88%
MTA	6	4.4	79%
MVA	14	3.9	89%
MAA	2	4.4	81%
MPA	2	4.1	80%
MDOT-Wide	58	4.3	85%

TANGIBLE RESULT DRIVER:

Simon Taylor Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:

Michael Phennicie Maryland Aviation Administration (MAA)

Jill Lemke

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To expand and strengthen community outreach programs to continuously improve relationships with neighbors.

FREQUENCY:

Quarterly & Annually

DATA COLLECTION METHODOLOGY:

Data on the number of outreach activities is tallied and reported by each business unit on a quarterly basis. A team of data drivers from each unit meets with the PM Driver to review the submitted data and discuss types of activities and lessons learned.

Satisfaction surveys are tallied and overall results reported annually.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.2A AND B

Educational/Civic Outreach Efforts with Our Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Being a good neighbor requires opportunities for shared experiences and face-to-face interactions. Community outreach programs can vary greatly in topic, size, and scope, particularly across the various MDOT business units. These diverse activities establish good relationships, the sharing of information, and ultimately spread good will throughout the community.

By documenting the number, scope, and level of satisfaction with these activities, and sharing experiences with one another, each transportation business unit can expand and enhance its community outreach efforts while maintaining and strengthening relationships with those Marylanders who live adjacent to MDOT's various transportation facilities.

When the measure was introduced, no data existed. After a year, MDOT reached an important milestone for this performance measure, and now have a years' worth of data to establish a baseline for the measure. Through the implementation of a satisfaction survey MDOT can determine which outreach efforts are best received by our neighbors.

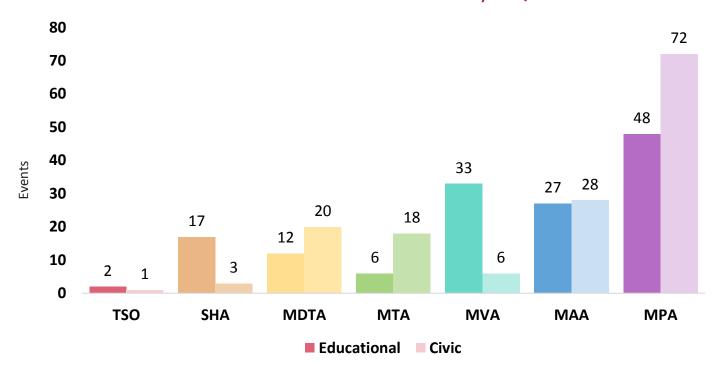
MDOT is identifying areas for improvement, and working with each business unit to encourage more effective outreach program development. Outreach information is being shared between business units, including examples of successful outreach opportunities that can be replicated.



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Our Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

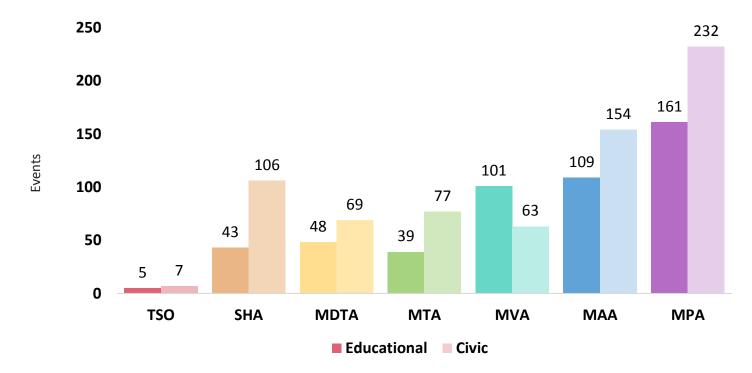
Chart 8.2A.1: Educational and Civic Outreach Events by TBU Q4 2016



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Our Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2A.2: Educational and Civic Outreach Events by TBU 2016



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Our Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2B.1: How useful was the information presented in 2016?

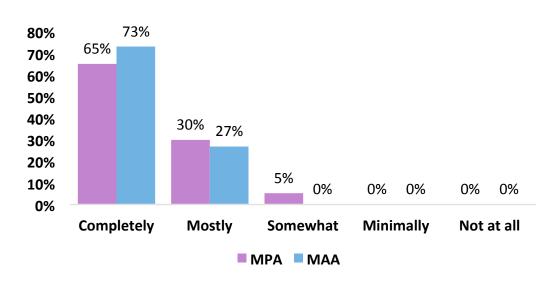
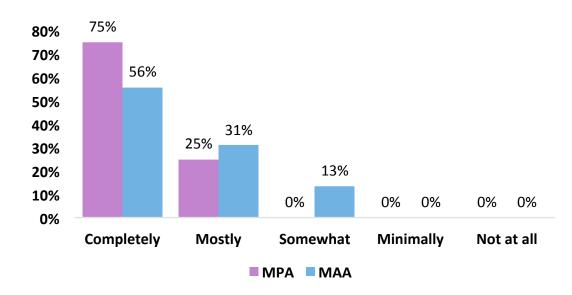


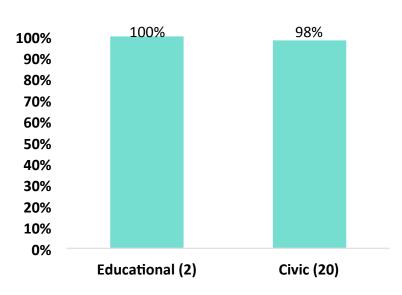
Chart 8.2B.2: How satisfied were you with the event or presentation in 2016?



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Our Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2B.3: MVA Overall Satisfaction (by Event Type) in 2016





Simon Taylor Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:

Jim Hoover Maryland Transit Administration (MTA)

Terri Whitehead Maryland Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To assess the percent of facilities that meet or exceed ADA accessibility mandates and to ensure everyone access to facilities.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data on the number of owned and occupied facilities along with the number of facilities that are ADA compliant are tallied and reported by each business unit on an annual basis.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 8.3

Percent of MDOT Facilities that are ADA Compliant

Compiling and charting data for seven (7) TBUs on the percent of their Administrative Buildings that are owned and occupied daily that meet or exceed ADA mandates is essential to MDOT's customers and more importantly to MDOT's neighbors to ensure everyone can visit MDOT Administrative Buildings. Data collected will help to inform each Business Unit across MDOT on how and where to focus their resources to meet ADA compliancy and make our Administrative Buildings more accommodating to all our customers and neighbors who visit our Buildings.

Percent of owned and occupied Administrative Buildings that are ADA Compliant:

Each Tangible Business Unit rated individually:

- TSO 01 owned and occupied; 01 compliant = (100%)
- 2. 33 owned and occupied; 33 compliant = (100%)
- 3. MDTA - 12 owned and occupied; 12 compliant = (100%)
- MTA 16 owned and occupied; 16 compliant = (100%) 4.
- 5. MVA - 33 owned and occupied; 33 compliant = (100%)
- 7. MPA - 05 owned and occupied; 03 compliant = (60%)
- 8. MDOT WIDE – 161 owned and occupied; 159 compliant = (99%)

MAA - 61 owned and occupied; 61 compliant = (100%)

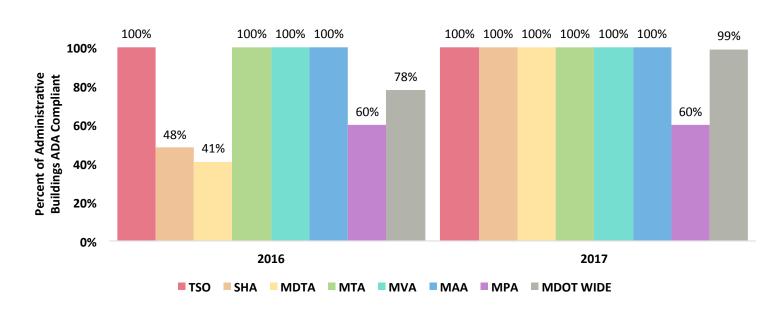
MDOT owned properties include several different elements that meet or exceed the ADA requirements. Our report is related to Administrative Buildings only, that are owned and occupied daily.

PERFORMANCE MEASURE 8.3

Percent of MDOT Facilities that are ADA Compliant

- MDOT owned properties include several different elements that meet or exceed ADA requirements.
- 2nd Annual report is related to Administrative Buildings that are owned and occupied daily. Rental properties, warehouses, mechanical shops, park and rides, and salt structures are not reported on in this report.
- MDOT WIDE 161 Administrative Buildings are Owned and Occupied. 159 Administrative Buildings are ADA Compliant. Compliant Rating MDOT WIDE is 99%.
- SHA, MVA, and MdTA has reported progress and Changes for 2017. Data collected in from July 2016 to present has improved. Several meetings with individual TBU's were conducted throughout the year with Data Drivers to get a better understanding of the performance measure. Increases in percentages from individual TBU's is a direct result of a better understanding of ADA Compliancy and how it relates to our performance measure.
- Remaining 1% non-compliant is identifying a team of key subject matter experts and a leader to develop a strategic action plan. Data on results, trends, and challenges are being collected now.

Chart 8.3.1: Percent of Administrative Buildings that are ADA Compliant by TBU 2016-2017

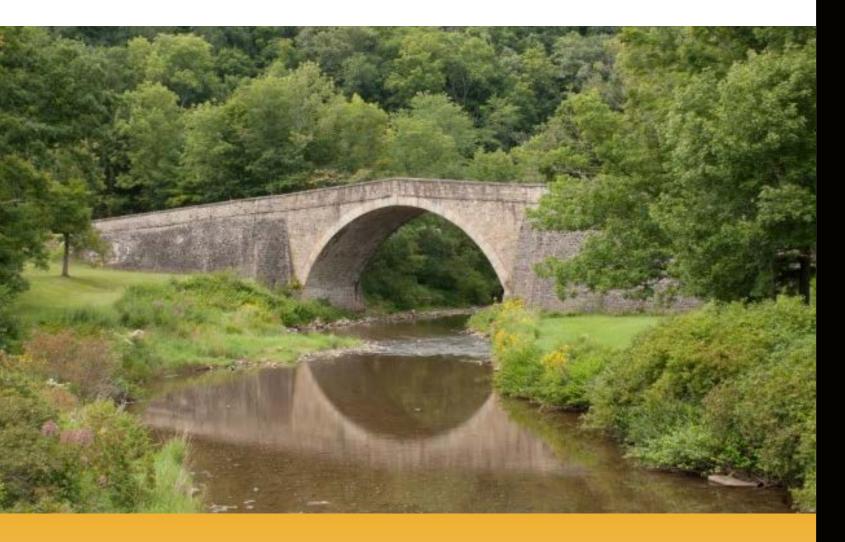


6.

Be a Good Steward of Our Environment

TANGIBLE RESULT #9

Be a Good Steward of Our Environment



MDOT will be accountable to customers for the wise use of limited resources and impacts on the environment when designing, building, operating and maintaining a transportation system.

RESULT DRIVER:

Dorothy Morrison The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:

Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Sonal Ram

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the health of the Chesapeake Bay by measuring how well MDOT is achieving compliance with impervious surface restoration as required by the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer system (MS4) permit.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

MDOT is tracking all Bay restoration projects and impervious surface treatment associated with those projects to determine overall progress toward the 20 percent goal during their five-year permit term.

NATIONAL BENCHMARK:

PERFORMANCE MEASURE 9.1

Water Quality Treatment to Protect and Restore the Chesapeake Bay

The fastest growing source of pollution in the Chesapeake Bay is stormwater runoff. Urbanization intensifies runoff by increasing paved surfaces and decreasing areas where rainfall can seep into the ground. Stormwater runoff increases delivery of pollutants including trash, organic debris, and sediment from impervious areas to urban streams.

Restoration efforts for 20 percent of MDOT's existing impervious surfaces will increase infiltration and reduce stormwater runoff. MDOT uses restoration practices such as installing new and upgrading existing stormwater management facilities, stream restoration, tree planting, and operations like street sweeping and inlet cleaning. This will improve conditions in urban streams, and reduce pollution in the Chesapeake Bay.

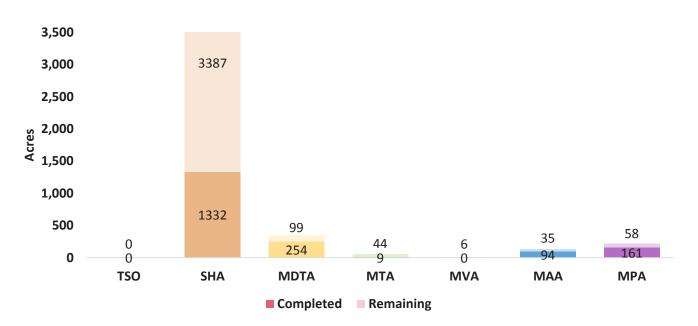
Chart 9.1.1 compares the impervious restoration accomplished by each TBU with the remaining acreage to be treated in order to meet the 20 percent restoration goal.

Approaching the 20 percent restoration requirements with a holistic One-MDOT strategy will include:

- Increased collaboration and data sharing between TBUs
- Intelligent analysis of cost and restoration strategy to determine the most economical opportunities for impervious restoration across all of **MDOT**
- Close coordination and collaboration to ensure all TBUs are adequately tracking and implementing Bay restoration projects and impervious surface treatment

Water Quality Treatment to Protect and Restore the Chesapeake Bay

Chart 9.1.1: Total MDOT Impervious Restoration in Acres by TBU



TANGIBLE RESULT DRIVER:

Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Paul Truntich Jr. Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To track overall fuel economy of fleet vehicles and ensure better air quality through the use of State vehicles. It is important to track miles per gallon in a meaningful manner to ensure that State vehicles are fuel efficient and not detrimental to air quality. Fuel economy data will be used to evaluate driving patterns as well as when the procurement of new fleet vehicles is considered.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Fleet MPG data will be obtained from the State of Maryland's fuel service vendor.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 9.2A

Fuel Efficiency: Miles Per Gallon

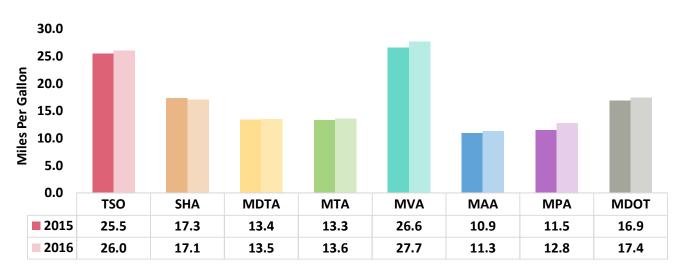
Reduced fuel costs and conservation of petroleum-based resources are the direct results of a more fuel efficient fleet (as determined through increases in vehicle miles per gallon calculations). Efforts with Mansfield Oil Company (statewide fueling vendor) have resulted in developing a means of tracking miles per gallon (MPG) data for the light-duty fleet throughout all TBUs. MPG data for CY 2015 and CY 2016 has been calculated and presented in Chart 9.2A.1. Although data is only presented for two years, fuel efficiency has increased by 0.5 MPG for the MDOT-wide from 2015 (16.9 MPG) to 2016 (17.4 MPG).

Vehicle replacement practices represent the largest factor affecting change to this measure. At pre-determined age or mileage thresholds, fleet vehicles are replaced. Since the presumption is that newer models are more fuel efficient than their predecessors, MPG calculations for each TBU and the MDOT-wide should increase from year to year through fleet replacement activities. However, in addition to fleet replacement, strategies such as encouraging carpooling to meetings and other functions and modifying state vehicle purchasing contract requirements are being evaluated as additional means of improving fleet MPG.



Fuel Efficiency: Miles Per Gallon

Chart 9.2A.1 MDOT TBU Light-Duty Vehicle Average MPG (CY 2015 - CY 2016)



TANGIBLE RESULT DRIVER:

Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Paul Truntich Jr. **Maryland Transportation Authority** (MDTA)

PURPOSE OF MEASURE:

To track overall fuel consumption of fleet vehicles as well as fixed-equipment in an effort to use less resources with State vehicles and equipment. Consumption patterns will be evaluated for improving fuel efficiency and shifting towards use of renewable fuels.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Fleet vehicle data will be obtained from the State of Maryland's fuel service vendor. Fixed-equipment data will be supplied from Fleet and Facility Managers at the TBUs.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 9.2B

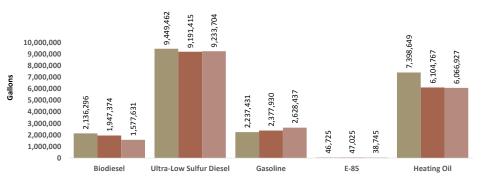
Fuel Efficiency: Total Gallons Consumed

Analyzing fuel consumption patterns enables Fleet and Facility Managers to budget more effectively and use resources more efficiently. This data also will be beneficial as fleet acquisition purchases are considered and facility heating upgrades are considered. Additionally, identifying opportunities for reducing fuel consumption not only benefits the environment via resource conservation and reduced emissions, but also results in true cost-savings through reduced fuel costs.

Fiscal Years 2014 through 2016 indicate relatively constant ultra-low sulfur diesel consumption with the MTA contributing to the majority of fuel consumed via its bus fleet and MARC trains.

Heating oil consumption experienced a significant reduction during the reporting period. While consumption is weather influenced, the MPA converted from oil-fired to natural gas HVAC systems at several facilities which contributed to the reduction. Furthermore, MDTA and MTA have similar construction projects either fully underway or within the design process. Biodiesel and gasoline experienced nearly identical reductions and increases, respectively. This is at least partially attributed to SHA's transitioning of its light and medium-duty fleet from diesel to gasoline for vehicle maintenance issues.

Chart 9.2B.1 Total Gallons of Fuel Consumed, FY 2014-FY2016



■ FY 2014 ■ FY 2015 ■ FY 2016

TANGIBLE RESULT DRIVER:

Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Hargurpreet Singh, P.E. Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the percentage of waste diverted from the landfill or incineration through recycling.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Maryland Department of the **Environment All State Agency** Recycling (All StAR) reporting.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 9.3

Percent of Maryland Recycling Act Materials Recycled

Recycling conserves resources, saves energy, reduces greenhouse gas emissions, reduces the amount of waste sent to landfills, reduces carbon footprint and helps protect the environment.

It demonstrates that MDOT is in compliance with the State of Maryland established recycling and waste reduction goals.

And, it is the Right Thing to Do!

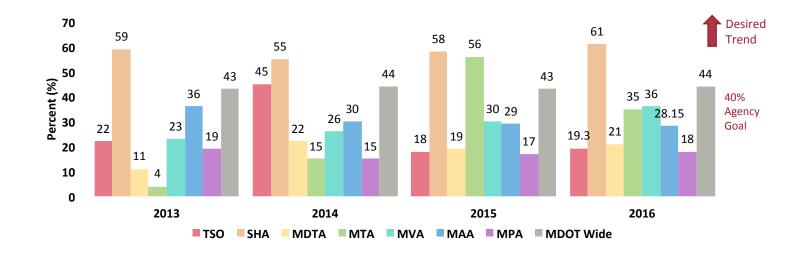
MDOT currently meets the 40 percent goal set by the Maryland State Legislature.

• To continue to meet and exceed recycling goals, MDOT continues to provide awareness training at individual TBUs and to evaluate dumpster size and frequency of trash collection services.

PERFORMANCE MEASURE 9.3

Percent of Maryland Recycling Act Materials Recycled

Chart 9.3.1: Percent Waste Recycled by TBU, CY 2013 - 2016





Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Barbara McMahon Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To reduce TBU impact on solid waste landfill through recycling/ reuse of steel, asphalt and concrete.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

The data collection methodology will include disposal weights (via bill of ladings) by Business Unit's Facility Maintenance and **Engineering Departments.** The data are and/or should be reported on the annual Non-Maryland Recycling Act Report.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/ **Demolition Projects**

MDOT is committed to reducing its impact on solid waste, non-hazardous landfills, potentially resulting in reduction of the number of waste disposal facilities in Maryland as stated in the Maryland Department of the Environment's "Zero Waste" Action Plan. The TBUs established plans to recycle and/or reuse their solid waste: steel, asphalt and concrete. These materials are to be collected, weighed and recycled/reused. Benefits include saving energy and natural resources, preserving the capacity of landfills, reducing waste disposal costs, generating revenue for materials and reducing pollutants generated by landfill process.

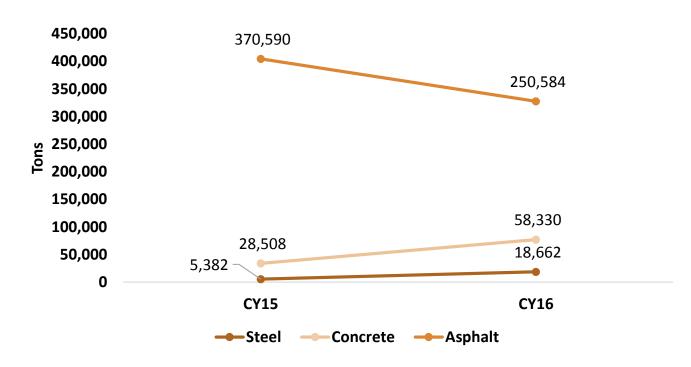
Due to the number and type construction/demolition activities and projects, MDOT recognizes there may be variability among reporting periods and TBUs, but positive change can still occur by implementing some or all the following:

- Establish central data collection mechanisms and procedures in each TBU.
- Require contractors to segregate, collect, weigh and recycle these materials and provide information to the TBU.
- Ensure commitment to the goal and its positive impact on the environment by making employees and contractors aware of this PM.

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/ Demolition Projects

Chart 9.4.1: Recycled/Reused Materials from Maintenance Activities & Construction/Demolition Projects, CY15-CY16



Be a Good Steward of Our Environment



Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Robin Bowie Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To provide consistent monitoring of TBU compliance with environmental requirements and to ensure MDOT meets Federal, state and local environmental regulations.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Enterprise Environmental Information Management System.

NATIONAL BENCHMARK:

International Organization for Standardization (ISO) 14001 ISO has a requirement to "evaluate compliance." The standard does not dictate the frequency but states that an organization's "process needs to determine how often each level of compliance will be checked."

PERFORMANCE MEASURE 9.5

Compliance with Environmental Requirements

MDOT activities and operations are subject to various Federal, state, and local environmental regulations. Adherence to the environmental requirements minimizes the potential for activities and operations of transportation facilities to adversely impact the environment and the surrounding communities. Compliance with the environmental requirements that govern MDOT activities and operations is key to being a good steward of the environment and conducting audits is an effective way to monitor this compliance. Tracking audits and reporting audit results further demonstrates MDOT's commitment to environmental stewardship, which benefits not only the natural environment but also the citizens of Maryland.

MDOT participated in third party audits as part of an agreement with Environmental Protection Agency (EPA) Region 3. The frequency of audits conducted since the EPA third party audits have varied for each TBU. The initial round of information collected initial round of information collection and review also revealed a difference in the type (internal vs. external) of audits that have been conducted by each TBU. Several TBUs are in the process of formalizing audit processes and/or procuring audit contracts. Strategies put into place to bring the TBUs into a more consistent reporting method include standardizing audit activities across MDOT, developing a comprehensive environmental compliance audit checklist for use during audits and developing an enterprise environmental management system (EEIMS) module for reporting audit information. MDOT will share audit results on an annual basis.



Be a Good Steward of Our Environment



Dorothy Morrison The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Laura Rogers The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To reduce consumption of conventional energy through efficiency measures and renewable energy sources.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data for MDOT's electricity usage collected online will be evaluated. Data for energy efficiency measures and renewable energy sources utilized by MDOT will be collected from the TBU Energy Managers. Emissions calculated based on the amount of energy used.

NATIONAL BENCHMARK:

Renewable Energy Consumption as a Share of State Total (2014): Oregon, 49.3%; Washington, 47.1%; Maine, 38.3%

American Council for an Energy Efficient Economy ranked Maryland 9 in the 2016 State Energy Efficiency Scorecard. California and Massachusetts tied for number 1.

PERFORMANCE MEASURE 9.6 **Energy Consumption**

Reducing conventional energy consumption through energy efficiency measures and use of renewable energy can generate revenue saves Maryland taxpayers money, reduces harmful air emissions and helps Maryland meet its clean energy and greenhouse gas (GHG) reduction goals.

The desired trend for conventional electricity use, cost, and associated carbon dioxide equivalent (CO2e) emissions are decreases. In FY17 Q2, there was a slight increase over FY16 Q2 in usage (292 megawatt hours), cost (\$16,550), and CO2e emissions (1,481 metric tons). The desired trend for renewable energy generation, cost avoidance, and CO2e emissions avoidance is an increase. In FY17 Q2, there was a slight increase over FY16 Q2 in generation (66 megawatt hours), cost avoidance (\$7,000), and CO2e emissions avoidance (47 metric tons).

MDOT is undertaking many strategies to increase its energy efficiency and renewable energy use. Each TBU has completed a comprehensive Energy Plan that details its energy consuming entities, existing and future energy conservation strategies, and future energy conservation goals. A few examples of existing energy conservation measures include: Energy Performance Contracts; MDOT-wide Renewable Energy Development Contract; lighting upgrades; participation in Demand Response Programs; energy audits; building automation systems; sub-metering; system preservation (e.g., new roofs and windows); routine inspection and preventative maintenance programs; and tenant awareness programs. Many of these energy conservation measures also realize secondary benefits, such as improved lighting quality, lower operation and maintenance expenses, increased life span of equipment, improved indoor air quality, and enhanced tenant comfort.

MDOT is expanding its services to meet the needs of its customers. The more people who use MDOT facilities and the more these facilities increase in size to meet customer needs, the more energy is used. While the desired trend for energy consumption is to go down, simply looking at the amount of energy used does not portray an accurate picture of MDOT's energy conservation efforts. For this reason, MDOT is working to develop a standardized Energy Use Index that considers energy use, square footage, and number of users. This Index will give MDOT a better baseline to work from and affect change.

PERFORMANCE MEASURE 9.6

Energy Consumption

Chart 9.6.1: Total MDOT Conventional Electricity Use & Cost FY2015-FY2017

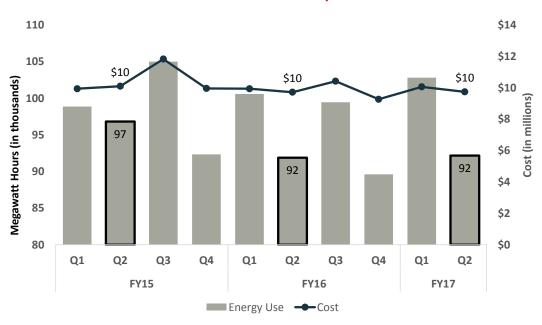
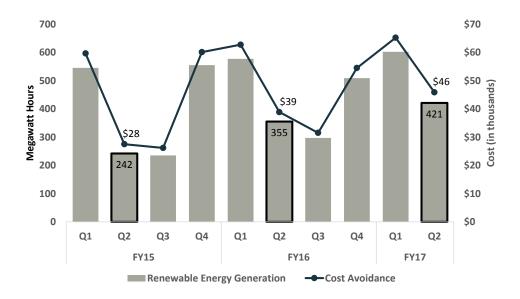


Chart 9.6.2: Total MDOT Renewable Energy Generation & Cost Avoidance FY2015-FY2017



TANGIBLE RESULT #10

Facilitate Economic Opportunity in Maryland



Maryland's transportation system is essential to the State's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national and global marketplace. Transportation directly impacts the viability of a region as a place where people want to live, work and raise families, and all critical to attracting a competent workforce.

RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track direct, indirect and induced jobs generated by annual construction investments as an indicator of transportation projects contribution to economic return.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MDOT compiles the necessary data through the annual CTP process.

NATIONAL BENCHMARK: N/A

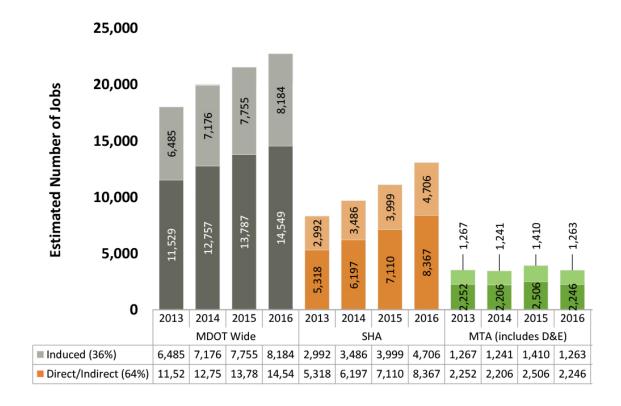
PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment

Construction spending on transportation projects has a significant economic impact on people and businesses throughout the state. Economic return from transportation investment is based on the estimated number of jobs created as a result of MDOT investments in capital projects. In FY2016, it is estimated that over 22,500 jobs were created by MDOT. The annual Consolidated Transportation Program (CTP) is used to identify planned investments by each MDOT TBU on major construction projects. Construction projects generate three types of jobs: direct jobs are those generated by the actual construction activity; indirect jobs are supported by the business purchases necessary for the project's construction; and induced jobs are a result of local purchases of goods and services by the direct employees. Capital investments in transportation infrastructure support economic activity across a wider region, beyond the specific project location.

Economic Return from Transportation Investment

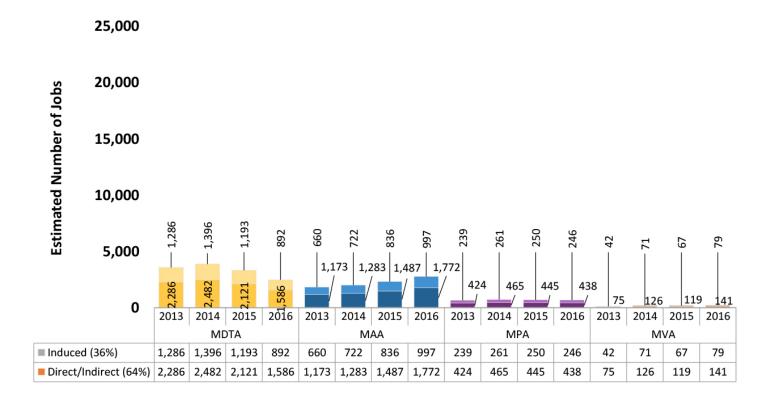
Chart 10.1.1: FY2013 to FY2016 Estimated Number of Jobs Created by Business Unit Capital/Construction Programs - (Actual FY Spending)



PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment

Chart 10.1.1: FY2013 to FY2016 Estimated Number of Jobs Created by Business Unit Capital/Construction Programs - (Actual FY Spending)





TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To compare Maryland against other states economic activity based on access to and condition of the infrastructure.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Using publicly available data, CNBC assesses every states infrastructure including value of goods movement; availability of air travel; road and bridge conditions; and commute times.

NATIONAL BENCHMARK:

CNBC annual ranking

Web link: http://www.cnbc. com/2016/07/12/americas-topstates-for-business-2016-thelist-and-ranking.html

PERFORMANCE MEASURE 10.2

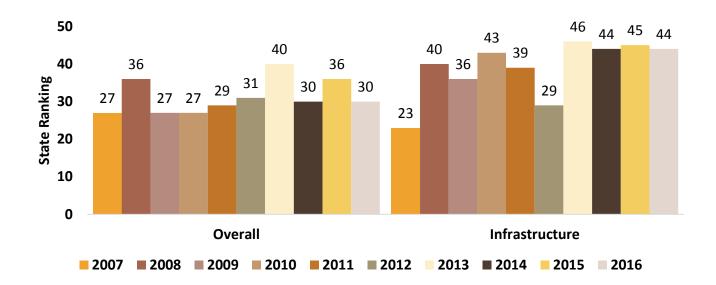
Maryland's Ranking in National Transportation Infrastructure Assessment

The CNBC business news media group uses publicly available data on 60 measures of competitiveness to score each state. The metrics are organized into 10 broad categories and weighted based on how frequently each is used as a selling point in state economic development marketing materials. The infrastructure category is a measure of a state's transportation system and supply of safe drinking water. It includes metrics to compare the value of goods shipped by air, waterways, roads and rail within a state, the quality of roads and bridges, and commute times. The annual rankings can be used as a national benchmark for economic activity over time as a means for comparing Maryland's standing versus other states. From 2015 to 2016, Maryland's overall score moved up from 36 to 30 out of 50 states. As of 2016, Maryland moved up slightly from 2015 in 'Infrastructure" (44 out 50 in 2016 up from 45 in 2015) but remains in the bottom 10 because of the inclusion of mobility calculations in the metric.

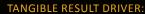
PERFORMANCE MEASURE 10.2

Maryland's Ranking in National Transportation Infrastructure Assessment

Chart 10.2.1: America's Top States for Business Annual Rankings for Maryland in Select Categories, 2007-2016







Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Juan Torrico Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess freight mobility and the amount and value of freight originating and terminating in Maryland as an indicator of how supportive transportation infrastructure is for freight and Maryland's economy.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

U.S. Department of Transportation Freight Analysis Framework (FAF4) Version 4 and MPA.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.3A

Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Efficient and interconnected multimodal freight movement is essential to the State's economy, because freight is the economy-in-motion. Maryland manufacturers depend on the freight system to move raw materials and finished goods between production facilities, distribution centers and retail outlets in Maryland and throughout the U.S. and the world. Freightdependent industries account for over one million jobs in Maryland.

- Water and rail are well-suited to cost-effectively haul goods long distances. Commercial ships utilize the Port of Baltimore to transfer waterborne goods to land, at which point trucks and rail haul these imported goods to communities around the nation.
- Trucks carry nearly every type of commodity, from consumer products to chemicals to machinery.
- High value and time-sensitive products are commonly shipped via air. The top air freight commodities shipped out of MAA facilities include mail, machinery and transportation equipment.

MDOT is currently updating the Strategic Goods Movement Plan to address the latest Fixing America's Surface Transportation (FAST) Act requirements.

PERFORMANCE MEASURE 10.3A

Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Table 10.3A.1 2016 Freight Originating and Terminating in Maryland

METHOD FOR MOVING FREIGHT	TOTAL VALUE (BILLIONS)	TOTAL TONNAGE (THOUSANDS)
Air*	\$13.4	141
Pipeline & Other**	\$72.5	39,488
Rail*	\$15.1	26,206
Truck*	\$318.1	214,317
Water***	\$49.9	31,834
All Freight	\$469.0	311,986

^{*}Source: U.S. Department of Transportation Freight Analysis Framework (FAF4). Other, Multiple Modes and Mail, Rail, and Truck value and tonnage data is estimated based on FAF4 data. The data is based off of 2012 actual data collected by FHWA and is factored by FHWA through 2015. MDOT adjusts the yearly by a 2% annual growth rate that reflects a conservative estimate of domestic and international freight growth given current economic conditions.

^{**}Pipeline and Other freight consists largely pipeline, postal and courier shipments weighing less than 100 pounds and other intermodal combinations. Represents a combination of FAF4 Pipeline, Other and Unknown and Multiple Modes and Mail categories.

^{***} International cargo through the Port of Baltimore in 2016, source: MPA.

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Juan Torrico Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track public and private international waterborne cargo activity in the Port of Baltimore, which is a strong indicator of jobs generated and economic activity.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

U.S. Census data via website -**USA Trade Online**

NATIONAL BENCHMARK:

Mid-Atlantic ports international cargo.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Cargo through the Port of Baltimore is an indicator of the region's commercial health because freight is the economy in motion; if freight isn't moving, then neither is the economy. International tonnage in Baltimore increased 24% in Q4 2016 due to strong export in coal volumes (China closed unprofitable coal mines) and general cargo (imports and exports). The Port's general cargo was up 10% in Q4 2016. Imported general cargo saw increases in plywood, London Metals Exchange products (LME), furniture, automobiles and paper. Containerized exports such as waste paper, logs and lumber were the main drivers behind the general cargo export increase.

For full-year 2016, Baltimore's 6% increase in general cargo was the largest of all the Mid-Atlantic ports. Norfolk was second highest with a 2.4% gain in general cargo tonnage. However, Baltimore's total tonnage for the full year was down 1.9%, because bulk imports declined (salt dropped 54% due to the relatively mild winter of 2015/2016); and during the first three quarters there was weak global demand for export coal, in part due to the strong US dollar.

Concerning the bulk market place, New York, Philadelphia and Wilmington all saw large increases in bulk import tons as lower oil prices have curtailed domestic crude oil production. With less domestic oil available, refineries are now importing cheap foreign oil. Philadelphia saw increases in their bulk exports mainly in petroleum products such as propane gas and non-crude oils. New York, Philadelphia and Wilmington also saw large decreases in salt imports.

The MPA is an active partner with the Corps of Engineers to ensure the navigation channels are dredged to allow the world's fleets easy access to the port.

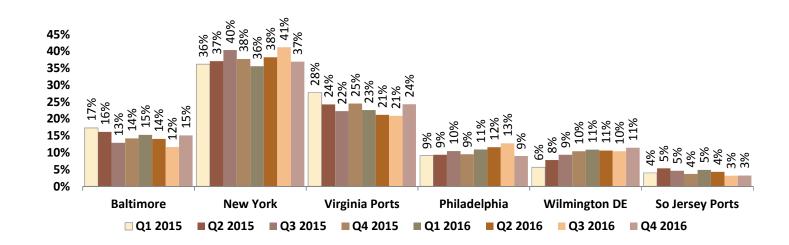
In the Mid-Atlantic region, the Port of Baltimore ranks:

- First in Autos and Roll-on/Roll-off heavy equipment (RoRo),
- Second for imported Forest Products,
- Third in container market share,
- Third for total international cargo.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Chart 10.3B.1: Market Share, Mid-Atlantic Ports International Waterborne Cargo



TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Juan Torrico Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

Data shows level of activity at Public Marine Terminals.

FREQUENCY:

Monthly

DATA COLLECTION METHODOLOGY:

Data obtained from MPA cargo billing reporting and statistical system (BRASS). Historical data is available back to 1998.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage Including the Following Strategic Commodities: Containers, Autos, RoRo and Imported Forest **Products**

As a rule of thumb, general cargo generates more jobs per ton than bulk commodities. Although international general cargo is one-third of the Port's total tonnage, it accounts for 96% of the cargo's value, and the State's public terminals handle the clear majority of general cargo. This is why it is an important measure to track. The MPA set an annual record in fiscal year 2016 of 9.8 million tons, and another record was set in calendar year 2016 at 10.1 million tons.

The data shows there was only one month in 2016 that was under 800,000 tons. Also, a new monthly record was set in January 2017 at 922,677 tons. Containers showed the strongest growth, followed by imported paper. Although low commodity prices on both agricultural products and minerals keep sales of farm, construction and mining equipment suppressed and the strong US dollar discourages exports, Baltimore remains the top Ro/Ro and Auto port on the East Coast.

MPA conducts a multi-pronged effort to sustain and expand cargo volumes, e.g., emphasizing long term contracts with favorable rates; marketing for the whole Port; facilitating ways to improve efficiency at Seagirt Marine Terminal to increase truck productivity; and managing the capital program to focus on system preservation. This will help keep current customers and enhancements keep pace with the evolving global logistics and ever increasing fleet size and vessel sharing agreements.

PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage Including the Following Strategic Commodities: Containers, Autos, RoRo and Imported Forest Products

Chart 10.3C.1: MPA General Cargo Jan 2016 - Jan 2017

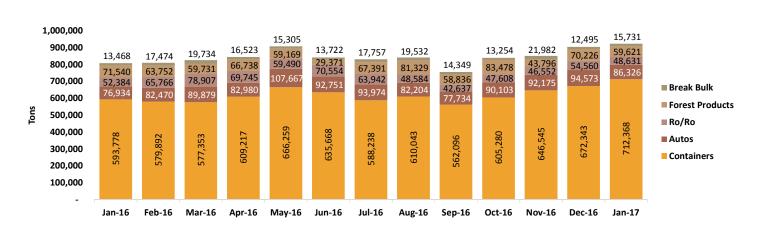
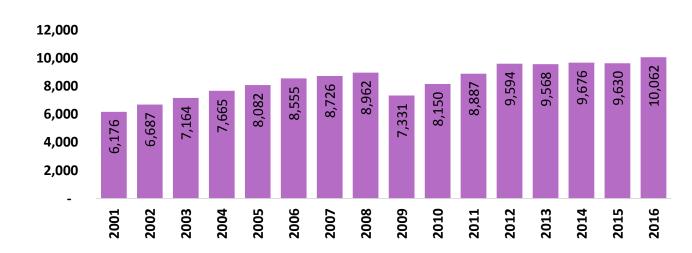


Chart 10.3C.2: MPA Total General Cargo Tonnage, 2001-2016



TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Rafael Espinoza **Maryland Transportation Authority** (MDTA)

PURPOSE OF MEASURE:

To minimize the number of weight-posted bridges to facilitate the improvement in movement of goods to businesses, communities and the economy.

FREQUENCY:

Annually (in July)

DATA COLLECTION METHODOLOGY:

Data reflects Federal reporting in April of each year. The number of bridges on the State System that are weight-posted are reported in the Structure Inventory and Appraisal (SI&A) report. That number is then divided by the total number of SHA and MDTA bridges, resulting in the calculation of the percentage of weightposted bridges on the State system.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.4

Number and Percentage of Bridges on the State System that are Weight-Posted

Weight-posted bridges are those that are determined unable to safely carry the maximum weight of a legally loaded vehicle (80,000 lbs. for tractor trailers and 70,000 lbs. for dump trucks). Weight-posted bridges adversely affect movement of goods to businesses and communities, and can impact daily commercial operations and business growth. Allowing all legallyloaded vehicles to traverse the bridges on the State system is essential to commerce in Maryland, facilitating the movement of goods and provision of services efficiently throughout the State. Minimizing weight-posted bridges ensures the safety of the traveling public and facilitates emergency response time by avoiding the need to establish detour routes. If a bridge cannot safely carry all legal loads, due to its present condition or original design criteria, it will be evaluated and a vehicle weight will be established that it can safely carry. This lower vehicle weight (which is less than the legal weight) will be placed on signs alerting all potential users of the maximum load that the bridge should carry.

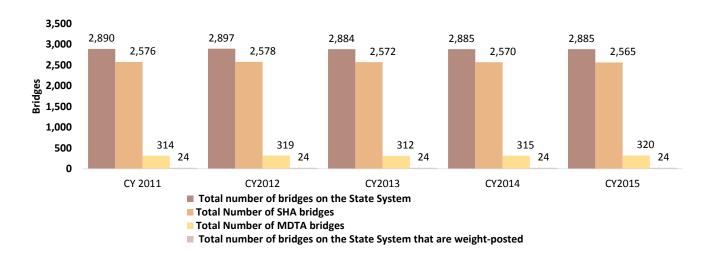
Whenever inspections of weight-posted bridges or structurally deficient bridges indicate that repairs are necessary to prevent a weight posting or the lowering of the existing allowable weight restriction, the work to prevent this will be given top priority, and where possible, complete actual construction 18 months from the date when the need for the work was established.

Less than 1 percent of SHA and MDTA bridges have a weight restriction.

PERFORMANCE MEASURE 10.4

Number and Percentage of Bridges on the State System that are Weight-Posted

Chart 10.4.1: Weight Posted Bridges, CY 2011-CY 2015



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the state's economy due to completed transportation projects providing businesses with access to labor, customers, and suppliers. Improved access leads to greater opportunities.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.5

Change in Market Access due to Improvements in the Transportation Network

Improving access within Maryland's transportation network is a critical role MDOT plays in facilitating economic opportunity for the citizens of Maryland, its businesses and those who come here to do business. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on market access. This measure would allow MDOT to look at how improvements in roads and multimodal access is affecting Maryland's economy and assess whether businesses have better access to labor, customers, suppliers and international markets.

This measure includes potential impacts from:

- Business Relocation Improved market access has the effect of strengthening an economy's competitiveness in attracting and retaining business relative to other locations.
- Productivity Growth Increasing an economy's accessibility and connectivity generates agglomeration benefits from returns to scale in production, knowledge spillovers, and better matching of suppliers and employees to businesses.
- Increased Import/Export Activity Improving an economy's access to international gateways can enable new import/export activity.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the market access has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency. We will present an example in July.

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Corey Stottlemyer The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the productivity of people and businesses in Maryland.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.6

Change in Productivity due to Improvements in the Transportation Network

Productivity gains are essential to economic growth as businesses and people have to do more with fewer resources. The transportation network is similar to the Internet and other innovations that allow people and businesses to be more productive. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on productivity.

Using a transportation economic impact model, MDOT will be able to assess four types of productivity benefits to ensure it helps to facilitate business opportunities throughout Maryland:

- 1. Travel cost savings;
- 2. Reliability benefits for industry;
- 3. Delivery logistics and supply chain benefits; and
- 4. Agglomeration effects on access to specialized skills and services.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the productivity has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency. We will present an example in July.



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To estimate benefits to highway users due to CHART incident management, major/minor capital improvements, signal retiming, HOV lane, and parkand-ride operations as an indicator of cost savings due to reduced delay.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MDOT collects and maintains data on travel speeds, traffic volumes, incidents, and facility usage to develop user cost savings.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.7

Total User Cost Savings for the Traveling Public due to Congestion Management

The SHA and MDTA implement various projects, programs and policies to reduce congestion and enhance mobility on their facilities. The SHA focuses on both recurrent and non-recurrent aspects of congestion. These include CHART, Incident Management and Intelligent Transportation Systems (ITS) programs, major/minor roadway geometric improvements, traffic signal system optimization, and multimodal strategies like HOV lane operations and park-and-ride facilities. The congestion management solutions implemented by SHA and MDTA result in significant user cost savings (e.g. delay reduction, fuel savings) to automobile and truck traffic. MDOT continues to implement operational strategies, including a Transportation Systems Management and Operations (TSM&O) Strategic Plan, and provides Traffic Incident Management training to partner organizations, while also exploring local, regional and state incident management coordination opportunities. Reductions in travel times directly result in roadway user cost savings.

PERFORMANCE MEASURE 10.7

Total User Cost Savings for the Traveling Public due to Congestion Management

Chart 10.7.1: Annual User Cost Savings Through MDOT Congestion Management Efforts 2011-2015



TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To quantify the degree of congestion experienced by highway users when traveling during peak hours.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Includes private sector vehicle probe speed data, and traffic count data on average weekdays.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.8

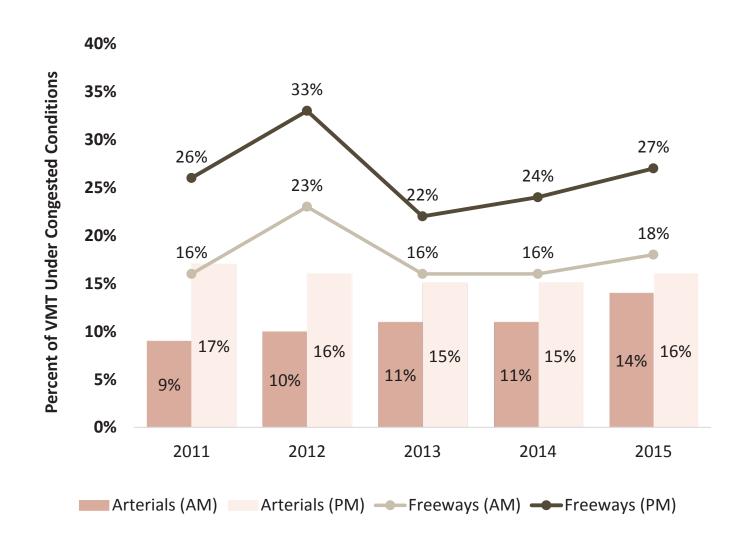
Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/ PM Peak Hours

This measure represents the percentage of peak hour VMT on Maryland highways that occur in congested conditions. Congestion on freeways is said to occur when the travel time index (TTI) ratio is greater than 1.3 (traffic travels at 25 percent slower than the free flow speed). Congestion on arterials is said to occur when the traffic Level of Service (LOS) is rated E, or worse, on a scale of A through F. These congestion metrics are a good indicator of customer experience on roadways in morning and evening peak hours. The share of VMT on the freeways/expressways which occurred in congested conditions is generally higher than the share for arterial roadways. Peak hour congestion is dominated by nondiscretionary trips including goods movement, commute and school trips. Reduced congestion and enhancing the reliability of peak hour trips make Maryland more attractive for economic development and provide users with a high quality safe, efficient and reliable highway system.

PERFORMANCE MEASURE 10.8

Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

Chart 10.8.1: Peak Hour Congested VMT Trends, 2011-2015



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To demonstrate Martin State Airport's share of the general aviation business in the Baltimore region.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Operations Network Data compiled by the Federal Aviation Administration.

NATIONAL BENCHMARK:

General aviation activity at BWI Marshall's general aviation facility.

PERFORMANCE MEASURE 10.9A

Market Share: Martin State Airport's Regional Market Share

Martin State Airport is a general aviation facility located in eastern Baltimore County, Maryland serving the general aviation needs of the Baltimore region. It is owned and operated by the State of Maryland. This performance measure gauges the percentage of itinerant general aviation activity at Martin State Airport as compared to the itinerant general aviation activity at BWI Marshall. Itinerant general aviation activity is defined as a flight where its origin or destination takes it beyond the electronic control of the local control tower. This measure captures the amount of discretionary use of Martin State Airport by the business and general aviation community flying in and out of the Baltimore region.

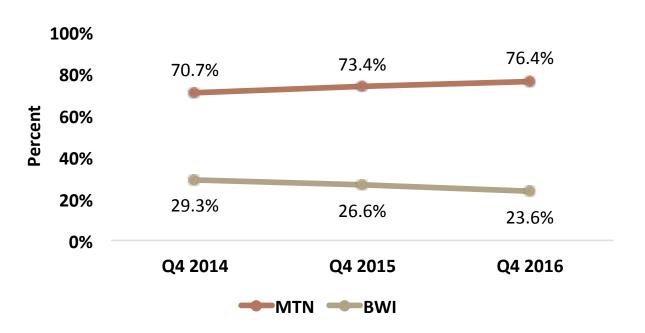
The volume of itinerant general aviation operations is an indicator of how much business traffic Martin State Airport is, or is not, attracting. The more itinerant operations, the more in potential fuel sales and other support operations occur at Martin State Airport. Such operations generate revenue and support existing jobs at, and around, the airport. Strong market share also indicates Martin State is adequately performing one of its primary missions, serving as a "reliever airport" for BWI Marshall. A reliever airport is one that attracts general aviation traffic away from a region's primary commercial airport, reducing demand on the congested airspace surrounding the commercial airport.

Martin State Airport is performing well. From Q4 2014 through Q4 2016, Martin State demonstrated strong growth in market share of itinerant general aviation operations, increasing from 70 percent to 76 percent while general aviation activity at BWI Marshall declined from 29 percent to 23 percent.

PERFORMANCE MEASURE 10.9A

Market Share: Martin State Airport's Regional Market Share

Chart 10.9A.1: Percent of Itinerant General Aviation Activity Q4 2014-2016





Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To demonstrate the percent of scheduled nonstop destinations served by BWI Marshall against the total number of nonstop destinations served by the region's three major airports.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY: Air service schedule analysis.

NATIONAL BENCHMARK:

Reagan National Airport; Dulles International Airport

PERFORMANCE MEASURE 10.9B

Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

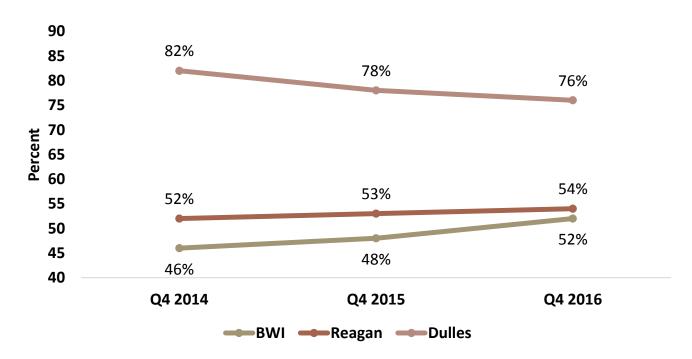
The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 25 million passengers flew through BWI Marshall Airport in 2016, an all-time-record for passenger traffic. In fact, BWI Marshall has posted 18-straight monthly passenger records through December 2016. International passenger traffic reached 1,233,466 million passengers in 2016, also a new record, and 2016 was the second-straight year with more than one million international passengers.

The number of nonstop destinations an airport serves is an important performance metric, as nonstop service is preferred by passengers. Due to the seasonal nature of air travel, the way to evaluate performance is by comparing how an airport performs in a particular quarter one year compared to that same quarter in another year. Chart 10.9B.1 demonstrates that BWI Marshall has produced a steady increase in nonstop destinations in the fourth quarter of the calendar year from 2014 to 2016. The number of nonstop destinations grew to 52 percent of all markets served by the region's three airports in Q4 2016 compared to 46 percent of all markets served in Q4 2014. Today, BWI Marshall provides more than 300 daily nonstop departures and nonstop service to more than 80 domestic and international destinations.

PERFORMANCE MEASURE 10.9B

Market Share: Percent of Nonstop Markets Served Relative to Benchmark **Airports**

Chart 10.9B.1: Percent of Nonstop Markets Served Relative to Benchmark Airports in Q4 2014-2016



TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To determine market share in Baltimore/Washington region by tracking number of passengers and departing flights at BWI Marshall compared to other airports in the region.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY: Air service schedule analysis.

NATIONAL BENCHMARK:

Reagan National Airport; Dulles **International Airport**

PERFORMANCE MEASURE 10.9C

Market Share: Percent of Passengers and Departing Flights Relative to Benchmark **Airports**

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport.

Due to the seasonal nature of air service schedules, the most valid way to track service performance is a comparison of identical guarters in prior calendar years. As seen in Charts 10.9C1 and 10.9C.2, BWI Marshall Airport's percentage of departing flights steadily increased between the fourth quarter of 2014 and the same time-period in 2016. This positive performance is due primarily to continued growth by Southwest, jetBlue, Spirit and Allegiant Airlines in 2016. In the fourth guarter of 2016, BWI Marshall Airport served more passengers than any other airport in the region.

BWI is first in market share of passengers and third in market share of number of departing flights. This is because Reagan National handles a great deal of commuter flights which use smaller aircraft and carry fewer passengers. This fact results in a larger number of overall departures at Reagan than BWI Marshall. This "commuter factor" is also present, to a lesser degree, at Dulles.

By contrast, BWI Marshall handles relatively few commuter flights. The overwhelming majority of flights at BWI Marshall involve regularly scheduled, longer distance flights using standard size commercial aircraft like the Boeing 737 flown by Southwest Airlines, which is responsible for 70 percent of the traffic at BWI Marshall. As an example, a commuter jet may carry 50 passengers where a 737-800 model aircraft flown by Southwest will carry 175.

PERFORMANCE MEASURE 10.9C

Market Share: Percent of Passengers and Departing Flights Relative to **Benchmark Airports**

Chart 10.9C.1: Percent Total Daily Departures at the Region's Airports Q4 2014-2016

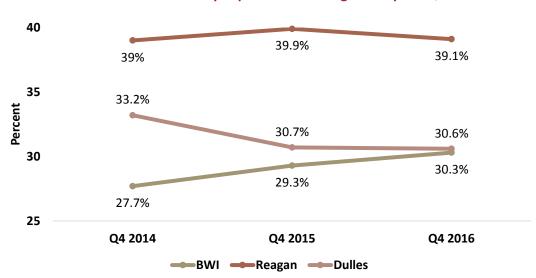
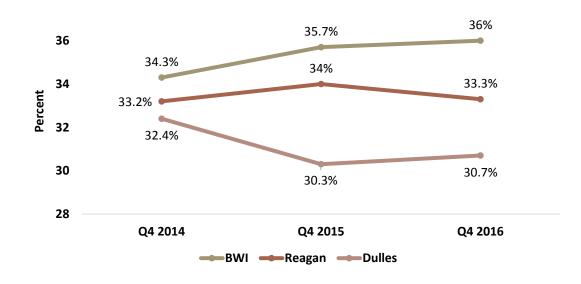


Chart 10.9C.2: Percent Total Passengers Served by the Regions Airports, Q4 2014-2016





TANGIBLE RESULT DRIVER:

Jim Dwyer Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Glen Carter

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To improve customer service with a predictable, consistent and transparent process for obtaining an access permit for development in Maryland.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Reviews, permits and delivery times are tracked in the Access Management Database.

NATIONAL BENCHMARK: N/A

PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

Access permits help promote safe and efficient roads for travel while supporting economic development and growth in jobs and businesses. The issuance of access permits, and the resulting construction of roadway and entrance improvements by developers, are some of the last steps before opening a business or selling commercial or residential properties for occupancy. This activity contributes to the creation of new jobs, businesses and development/redevelopment opportunities.

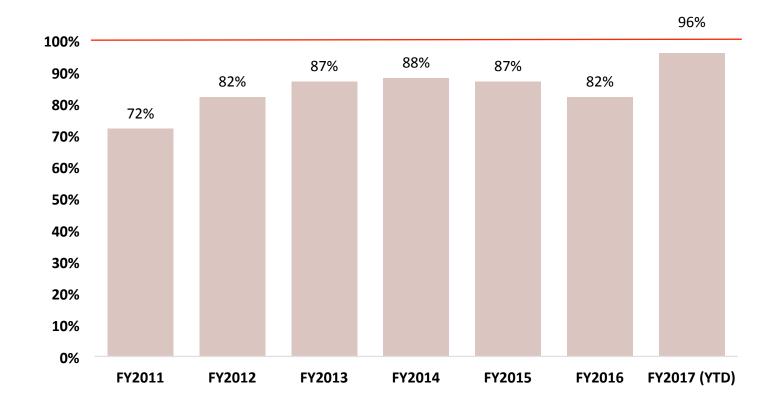
This measure tracks MDOT-SHA efforts to improve customer service with a predictable, consistent and transparent process for obtaining an access permit. The performance target is 100 percent of permits are issued within 21 days (after receipt of a complete application package). On average over the last five years, 105-125 completed applications are received each year.

- Meeting with stakeholders in working group to implement a preapplication process with stakeholders to establish clear expectations.
- Additional reviewers have been added at the District level.
- Implementing an electronic plan submittal process to facilitate plan exchange and reviews.

PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

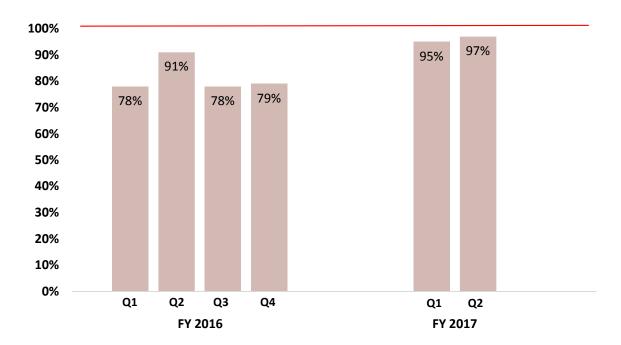
Chart 10.10.1: Percent of Permits Issued Within 21 Days (YTD) FY2011-FY2017



PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

Chart 10.10.2: Percent of Permits Issued Within 21 Days Goal: 100%



All Electronic Tolling (AET) – Collection of tolls at highway speeds using E-ZPass transponders or video tolling; no toll booths or cash collection.

Annual Attainment Report on Transportation System Performance – Pursuant to Transportation Article Section 2-103.1 of the Annotated Code of Maryland, the State is required to develop or update an annual performance report on the attainment of transportation goals and benchmarks in the Maryland Transportation Plan (MTP) and Consolidated Transportation Program (CTP). The Attainment Report must be presented annually to the Governor and General Assembly before they may consider the MTP and CTP.

Calendar Year (CY) – The period of 12 months beginning January 1 and ending December 31 of each reporting year.

Coordinated Highways Action Response Team (CHART)

- CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of the State Highway Administration, Maryland Transportation Authority and the Maryland State Police, in cooperation with other federal, state and local agencies.

Consolidated Transportation Program (CTP) -

A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.

Fiscal Year (FY) – A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.

MPA General Cargo – Foreign and domestic waterborne general cargo handled at the public (MPA) terminals.

Port of Baltimore Foreign Cargo – International (Foreign) cargo handled at public and private terminals within the Baltimore Port District. This includes bulk cargo (e.g., coal, sugar, petroleum, ore, etc. shipped in bulk) and all general cargo (e.g., miscellaneous goods shipped in various packaging).

MAA – Maryland Aviation Administration operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport, a general aviation/reliever airport northeast of Baltimore.

MDTA – Maryland Transportation Authority operates and maintains the State's eight toll facilities.

Mode - Form of transportation used to move people or cargo (e.g., truck, rail, air).

MPA – Maryland Port Administration promotes the Port of Baltimore as a leading east coast hub for cargo and cruise activity.

MTA – Maryland Transit Administration provides Local Bus, Light Rail, Metro Rail, Paratransit services and regional services through commuter rail (MARC) and Commuter Bus, as well as grant funding and technical assistance.

MVA – Motor Vehicle Administration serves as the gateway to Maryland's transportation infrastructure, providing a host of services for drivers and vehicles, including registration, licensing and highway safety initiatives.

SHA – State Highway Administration manages the State's highway system which includes 17,117 lane miles of roads and 2,564 bridges

TBU – Transportation Business Unit

TSO - The Secretary's Office

Vehicle Miles of Travel (VMT) – A measurement of the total miles traveled by all vehicles.



Boyd K. Rutherford Lt. Governor



Larry Hogan
Governor



Pete K. RahnSecretary of Transportation

MARYLAND DEPARTMENT OF TRANSPORTATION.

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